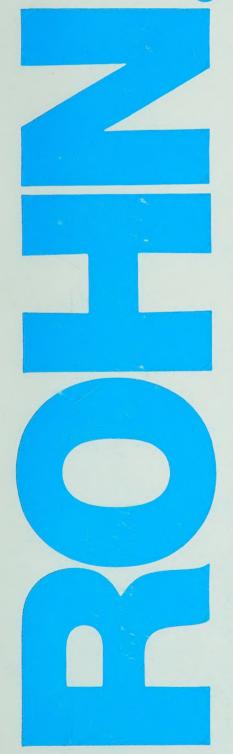
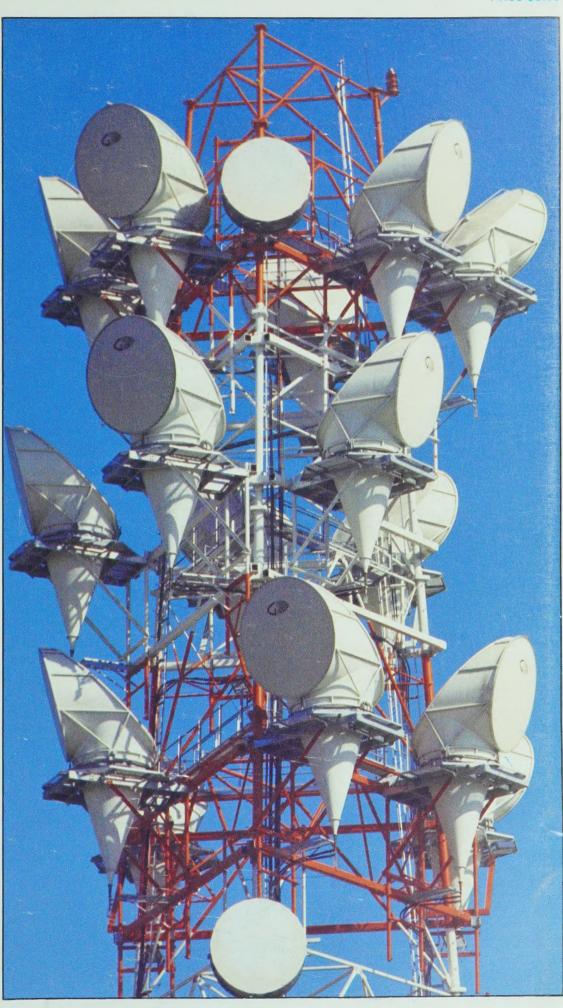
# Commercial Products

MAR 1 5 1988







The information contained herein does not purport to cover all details or variations in equipment nor provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently herein for the purchaser's purposes, the matter should be referred to the Rohn Home Office.

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

## All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

## IMPORTANTNOTICE

MOST CATALOG SHEETS REFERENCE EIA STANDARD RS-222-C UNLESS OTHERWISE NOTED. REVISIONS WILL BE MADE TO INDIVIDUAL SHEETS PERIODICALLY TO INCORPORATE ANSI/EIA-222-D-1986 STANDARDS.

ROHN

FORM NO. 872061

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https://archive.org/details/commercialproduc00unse

### ROHN FACTORY SALES PERSONNEL

If you require additional information concerning ROHN Products, please contact the appropriate ROHN Sales Manager from the list below:

Kenneth L. Cordrey
EASTERN DIVISION SALES MANAGER
P. O. Box 106
Worton, MD 21678
Ph. 301-778-4441
FAX: 301-778-3096

Larry A. Grimes
CENTRAL DIVISION SALES MANAGER
2631 Tarna Street
Dallas, TX 75229
Ph. 214-241-7791

James F. (Fred) Hardee
MIDWEST DIVISION SALES MANAGER
P. O. Box 2000
Peoria, IL 61656
Ph. 309-697-4400
TWX: 910-652-0646
FAX: 309-697-5612

Philip W. Metcalfe
NORTHWEST DIVISION SALES MANAGER
P. O. Box 2000
Peoria, IL 61656
Ph. 309-697-4400
TWX: 910-652-0646
FAX: 309-697-5612

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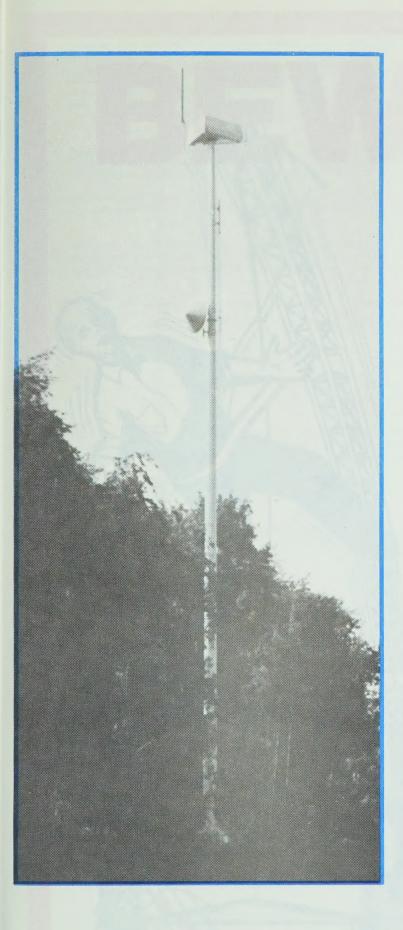
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Ph. 201-775-464
Axi. 201-775-464
PAX: 201-775-464-

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ROHN, the leader in Communication Support Structures, now offers you our custom engineering and Hot Dip Galvanizing for *all* your custom Communication needs.

We are proud to introduce the addition of **Tapered Tubular Poles** to our extensive line of Communication Structures.

The new galvanized **Tapered Tubular Poles** are available with various options including cellular mounting platforms, antenna mounts, or custom painting.

Complete turnkey installation is available on all **ROHN**Communication Structures.

## ROHN

6718 West Plank Road P.O. Box 2000 Peoria, IL 61656 309-697-4400 TWX: 910-652-0646 FAX: 309-697-5612 Communication Support Students

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Communication reads.

We are create to introduce the addition of frequent Tucken Pulse to car minerally line of Communication Birectures.

Complete lumber installation is available on all ROWN

## MHOR

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INSTALLATION SUPERVISORS, WARNING LABELS, CATALOGS, GUY CHARTS, ETC. ARE AVAILABLE FROM ROHN.

DUE TO GOVERNMENT REGULATIONS, BE SURE YOUR CUSTOMERS ARE INFORMED AS TO PROPER USE WHEN PURCHASING ANY ANTENNA SUPPORTING STRUCTURE.

THE MIXING OF SO-CALLED INTERCHANGEABLE COPIES OF ROHN TOWERS WITH ROHN TOWERS IS DANGEROUS AND VOIDS ALL ENGINEERING OR WARRANTY DATA SUPPLIED BY ROHN. MATERIALS USED BY THE SO-CALLED COPIES ARE NOT THE SAME QUALITY AND HAVE NOT BEEN TESTED OR ENGINEERED BY ROHN TO CONFORM TO THE SAME QUALITY STANDARDS. MIXING OF ROHN ITEMS MAY ENDANGER THE LIVES OF YOUR CUSTOMERS AND CAUSE SERIOUS TOWER FAILURES AND FINANCIAL MISFORTUNE FOR ALL CONCERNED.

Installing and rigging towers, masts, and antennas require specialized skills and experience. Information supplied by Rohn assumes that all products will be installed by personnel having these skills and having installed similar products before. No one should attempt to install towers or masts without these skills and experience.

Rohn assumes no liability if faulty or dangerous installation practices are used. There are available trained and experienced personnel to assist in installation, maintenance, and disassembly. Contact your local installer if consultation or assistance is required.

Rohn does not recommend or warrant in any way the use of used tower sections. The use of used tower sections voids all warranties set forth by Rohn because no one knows if the used material has been misused, overloaded, or damaged. If, for some reason, tower sections are re-used, all new, galvanized, high strength bolt assemblies are recommended.

Rohn recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

All antenna installations must be grounded per local or national codes.

Do not install towers or masts near power lines. All towers or masts should be installed out of falling distance of power lines since every electrical and telephone wire should be considered dangerous.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

Rohn makes available many items and types of towers which may or may not be required for your particular installation. Based on local, state, or federal laws and building codes for your area, it may be necessary that your particular tower have special items or be given special consideration.

Rohn makes available, either as standard or specials, many items and special care should be taken as to whether any or all of these items are required for your tower. Please be specific and advise us of your exact needs. Rohn cannot be responsible for any omission at anytime.

Some items available in various types and sizes are safety climbing devices, ladders, safety cages, anti-climbing devices, work platforms, rest platforms, F.A.A. painting or lighting, grounding, and fencing. Special engineering service and special packaging are also available. If there are any special requirements for your tower, be sure to include them in your request for quotation and on your order.

Due to the present day Occupational Safety and Health Act regulations, towers and parts are available incorporating features which will permit a safe product. However, the following is our position with regard to OSHA.

It is Rohn's intention to comply with the Williams-Steiger Occupational Safety and Health Act of 1970. It is a policy of Rohn to design and make towers and related equipment that are safe to use without hazards to people and/or property. We cannot, however, agree to a "blanket" certification that we are in total compliance with this Act because there are provisions in it whose meaning and application are unclear.

Therefore, we ask that you list your specific requirements with which you wish us to comply. These requirements may or may not affect the price of the towers and equipment under consideration for purchase.

We appreciate the opportunity afforded and would be happy to answer any additional questions you may have relative to our proposal.

Your tower may or may not include step bolts for construction purposes. Step bolts are supplied on self-supporting towers as a convenience during construction.

If your tower has step bolts, the spacing at the section joints may not be consistent with the spacing throughout the tower. If this condition presents any hazard, please do not use these step bolts. If you or your customer think this possible unequal spacing will present safety problems to any personnel, do not install any step bolts. For proper safety Rohn recommends a ladder and safety climbing device on large towers where inexperienced personnel climb the tower.

Rohn will not be responsible for the use of step bolts. If you wish to use step bolts as supplied, this responsibility will be totally yours or your customers.

UNR-Rohn Division of UNR, Inc.

P. O. Box 170249 Birmingham, AL 35217-0249 P. O. Box 2000 Peoria, IL 61656 P. O. Box 609 Frankfort, IN 46041

P. O. Box 155 Bridgeport, NJ 08014 310 Quincy Street Reno, NV 89512 2631 Tarna Street Dallas, TX 75229



YOU CAN BE KILLED

If you are installing a CB base antenna and tower yourself — DO NOT attempt to raise the installation near any type of power line. Should your installation come into contact with any power lines *you can be KILLED.* Be sure your installation is out of falling distance of any overhead wires — including the lead to your home. Read all instructions carefully before you begin or better yet — call a professional — It May Save Your Life.



P.O. Box 2000 • Peoria, Illinois 61656



We've said it before...

We say it again...



## "There is a DIFFERENCE

Here's an actual example of a competitive tower after 5 years

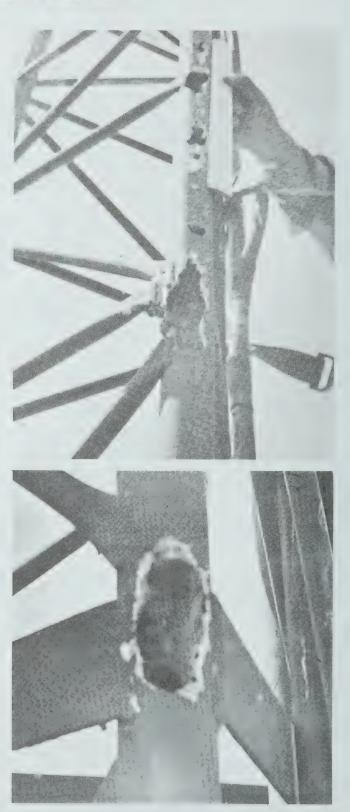
## "THEIRS"

In 1959, the Department of Highways of the State of Louisiana, purchased and had installed 7 communication towers fabricated by XYZ Co.

In 1964, approximately 5 years after installation, these towers (pictured here) had to be replaced because of serious and obvious corrosion and rust. In fact, as clearly seen, the towers were unsuitable for further service and presented a dangerous situation. Subsequently, they had to be removed . . . and in doing so, it was reported that the towers were so badly corroded that they could not be disassembled, but rather had to be toppled by cutting the guy wire at the anchor rod.



While corrosion and rust are natural occurrences from water, proper zinc galvanizing is an excellent preventative. But poor quality or improper galvanizing, or short-cuts in the galvanizing process, result in drastically shortened tower life and a very poor length of service.



# in Tower Galvanizing!"

and a ROHN Tower after 9 years...

## "OURS"

In 1964-65, after the XYZ Co. towers were taken down, they were replaced with 7 Model 65G ROHN Hot Dip Galvanized towers.

NINE YEARS LATER, in April, 1974, a single ROHN tower of this group was dismantled. The photos on this page are of that tower, indicating the striking preservation of the steel . . . without rust or corrosion of any kind.



A section of steel was then deliberately sawed from one of the tower legs (shown in the photo) in order to inspect the interior of the legs.

The results are clearly shown in this unretouched photo (below) indicating no visible corrosion or breakdown of the steel.

AFTER 9 YEARS, THE ROHN TOW-ER WAS READY FOR FAR LONG-ER AND CONTINUED SERVICE, THANKS TO A SUPERIOR GALVA-NIZING JOB!

## **ROHN TOWERS**

have always been quality Hot Dip Galvanized in-house and on-the-premises for absolute and complete quality control. The following page shows this process in detail . . . "the ROHN way".



# ROHN IN-HOUSE "Quality Control" Galvanizing

## means extra value for you!

CORROSION RESISTANT: Hot-dipped zinc galvanizing means that ROHN Products are absolutely corrosion-resistant. A minimum molten zinc coating of 2 ounces for every square foot of surface fuses permanently to the metal, becoming an actual part of the steel so it cannot be separated. Also the tubular steel used in ROHN Towers is coated both inside and outside to give absolute protection against deterioration from condensation and moisture.

CHIP AND SCRATCH PROOF: If a galvanized surface is scratched or chipped, the sur-

rounding zinc actually "heals the wound" and continues to seal out all corrosive elements! Nothing but hot-dipped galvanizing does this.

PERMANENT DURABILITY: Galvanizing means permanent protection and attractive appearance that cannot be matched by any other type of coating. With ROHN Products, you receive the very finest available—anywhere. All Hot-Dipped Galvanizing is done in the ROHN Galvanizing Plant according to ROHN Rigid Controls for Highest Quality.

Shown here are the huge pickling vats at ROHN where towers and other ROHN Products are prepared for galvanizing. Modern, high capacity equipment, skilled, experienced operators and finest raw materials keep ROHN quality high.

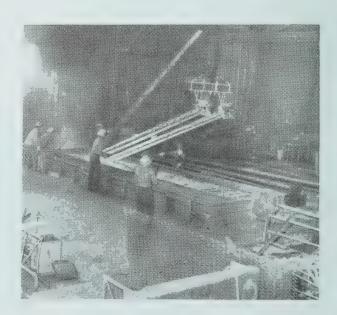


ROHN tower sections after fabrication are completely immersed in the molten zinc where all welds, points of construction, inner parts, including the interior of the tubing itself — is heavily coated with zinc.



6718 West Plank Road P.O. Box 2000 • Peoria, Illinois 61656 Phone: 309-697-4400 TWX 910-652-0646 U.S.A.





## ROHN FEWERSTON

Described herein are brief details of ROHN Towers. While primarily used in all types of communications, they also find uses in an amazing array of purposes. In fact, it literally can be said that today there is a ROHN Tower for every need. Hundreds of thousands of ROHN installations that further have withstood the greatest test of all . . . the

test of time! For over a quarter century ROHN has been supplying towers of all kinds for microwave, AM-FM-TV, radar, VHF and mobile radio, military purposes, airports, high-level lighting, meteorological, instrumentation and ecology needs . . . and a host of others that serve dependably as no other tower.

## TOWER No. 25 TOWER No. 45

### DESIGN



ROHN No. 45 tower is designed in an 18 inch equilateral triangular pattern. The three legs of the tower are of heavy, 14 gauge, special quality steel. The cross bracing is the ROHN "zig-zag" design using a continuous solid steel rod which is electric welded to side rails every 15 3/4 inches. All sections are 10 feet in length.

## CONSTRUCTION

This tower is constructed so as to be capable of being installed at guyed heights up to 200 feet. The entire tower is accurately constructed, utilizing precision machines and then electric welded throughout. Workmanship and materials are of the highest quality available and fully conforming to specifications.

## FINISH

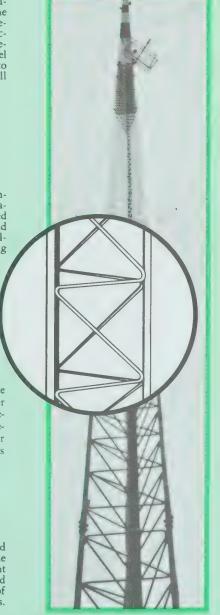
This tower is ROHN hot-dip galvanized after fabrication and this coating completely covers the inside and outside of tower surface with a minimum of 2 ounces of zinc per square foot.

ROHN No. 45 tower sections are completely hot-dip galvanized after fabrication to give permanent protection against corrosion. This completely covers every square foot of tower surface with a minimum of 2 ounces of zinc.

## RATING

This tower has a rating as follows: At 200 feet it will withstand a 30 lb. per square foot wind-load (equivalent to 86.6 MPH true wind velocity) when guyed and installed according to specifications. This includes an antenna with an area of 6 square feet plus 2 transmission lines.

In a 30 lb. per square foot wind load (86.6 MPH true wind) the tower can be installed to a height of 300 feet with an antenna load equivalent of 8 square feet of surface plus 2 transmission lines.



Illustrated here is a No. 45 tower installed to a height of 300 feet.

## ROHNTOWERS

# TOWER No.55 RIGID TUBE C-J

### DESIGN



Called "the straightest towers ever built", the ROHN Rigid-Tube Towers feature all bolted construction . . . available knocked-down for economy and ease in shipping. Knock-down feature cuts cube up to 500%.

## CONSTRUCTION

Constructed on an 181/2 inch equilateral triangle pattern, utilizing 1½ inch x ½ inch high quality steel side rails. Each section is 10 feet in length. Cross bracing is formed by a continuous 7/16 inch solid rod fashioned into a zig-zag shape, joining side rails every 15<sup>3</sup>/<sub>4</sub> inch, electrically welded throughout.

This series offer towers of 18" (J Series), 24" (C Series) triangular configuration with varying size steel legs of from 10 to 14 gauge, from  $1\frac{1}{2}$ " to 3" O.D. and from 20 ft, to 10 ft. sections respectively.

## **FINISH**

All tower sections completely hotdip galvanized after fabrication to permanently protect all points of welding and construction against corrosion-and add enduring beauty to the tower. A minimum of 2 ounces of zinc per square foot of surface is used.

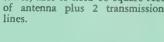
C Series Towers come in hot dip galvanized finish after fabrication according to ASTM specification A-123 which gives a minimum of 2 oz. of zinc per square foot of surface. Hardware meets ASTM specification A-153.

## RATING

When properly guyed at 400 feet this is a 30 lb. per square foot tower, able to hold 10 square feet of antenna plus 2 transmission

C Series rated 400 feet and J Series to 300 feet depending on wind load and antenna loading (check Engineering Department recommendations) for special applications.





# ROHN, TOWERS

## TOWER No. 80 TOWER No. 90

## DESIGN

This tower is designed specifically for microwave installations and heavy duty communication and broadcast uses. The Model 90 Tower is designed specifically for heavy microwave loads and TV broadcast where large top mounted UHF or VHF transmitting antennas are required. However, the ROHN Model 90 Tower can be used for other communications and meteorological applications of tall heights or where inside climbing facilities are required.

## CONSTRUCTION

The No. 80 tower is constructed in an equilateral triangular pattern with steel legs and cross-bracing in a pattern as indicated by the insert. The triangular size is 41" on leg centers and the diameter and weight of the tower legs varies to meet the requirements of the installation. This feature permits considerable flexibility in supplying a tower tailored to specifically meet and adequately handle the antenna to be installed. Cross-bracing is of tubular steel with bolted construction.

The ROHN Model 90 is constructed of an equilateral triangle pattern, 5 ft. on leg centers. All bolted steel construction, of variable size tubular legs and angle braces, provide a wide range of design conditions.

### **FINISH**

All components of this tower are completely hot-dip galvanized after fabrication to protect all areas of the tower. A minimum of 2 ounces of zinc per square feet of surface is applied throughout including bolts.

All components of these towers are completely hot dip galvanized after fabrication to protect all areas of the tower, including both inside and out of tower legs. A minimum of 2 ounces of zinc per square foot of surface is applied throughout, including bolts and nuts.

## RATING

This tower is rated for installation to maximum height of 800 feet using variable size and weight of tubular steel components. Each tower is engineered to handle a particular job as far as antenna and loading requirements.

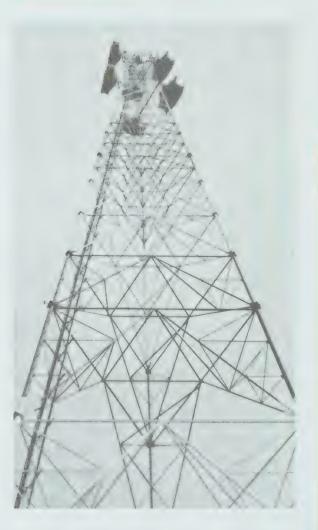
The ROHN Model 90 Tower is rated for heights up to and exceeding 800' depending on local conditions.



ROHN NO. 90 TOWER installed to 800 ft. for CATV, FM and TV.

# ROHN FEWWERS

## **SSV SELF-SUPPORTING TOWER**



ROHN<sub>®</sub>

6718 West Plank Road P.O. Box 2000 • Peoria, Illinois 61656 Phone: 309-697-4400 TWX 910-652-0646 Here is a superbly designed, unique tower series that fills a wide range of needs because of their extraordinary versatility! Widely used for all types of communication, broadcasting, microwave and industrial needs, the ROHN SSV series has many outstanding features to make it worthy of consideration for your requirements.

## Outstanding Features of the ROHN "SSV" Series Towers . . .

- Designed for a minimum wind load of 30 psf. Towers requiring higher wind or ice loads are no problem due to the tower's amazing versatility.
- Standard designs available in heights to 500 feet depending on loading. Special towers available depending on specific requirements.
- The SSV series make use of primarily knock-down construction for on-site assembly, which reduces shipping costs.
- Towers for minimal loadings are available in welded construction in heights up to 60 feet, shipped in 20 foot sections.
- All components and hardware are Hot Dip Galvanized after fabrication with a zinc coating per E.I.A. Standards.
- All ROHN SSV series towers are engineered, designed and fabricated to meet or exceed latest E.I.A. specifications.

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

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#### TERMS AND CONDITIONS RELATING TO ALL SALES

- All quotations, proposals, prices, or other terms are made for acceptance within 60 days (after 60 days, prices in effect at time of shipment will apply) and shipment within 60 days of purchase order date, unless otherwise stated. They are subject to change without notice; however, we invite your request for an extension. They are also subject to Credit and Marketing Department approval prior to acceptance. No other price protection is available.
- 2. Every effort will be made to maintain shipping schedules. All deliveries and schedules are contingent on availability of raw materials, fuel, and transportation. We will not be liable for damages on account of any delays due to causes beyond our reasonable control. Rohn reserves the right to make partial shipments and to submit invoices accordingly.
- 3. Changes or modifications to orders can be made only by written agreement executed by all parties affected thereby, which agreement shall include any price modification.
- 4. Rohn's responsibility ceases upon delivery of all shipments to the carrier. The unloading of all shipments is the responsibility of the customer, not the carrier or Rohn. Buyer is warned against receipting for merchandise until careful inspection has been made. Any claim made against Rohn must be made within 90 days after receipt of merchandise. All merchandise leaving Rohn's factory has been carefully inspected and Rohn does not assume responsibility for damages or shortages which occur in transit. Buyer must make all claims and report all damages and losses to the delivering transportation company.
- 5. No federal, state, or local taxes are included in quoted prices. All quotations, proposals, prices, or other terms are subject to increase without notification by the amount of any sales, excise, or other tax levied or charged to seller by any governmental agency and any such tax will be passed onto purchaser as a tax or as an addition to the selling price. This also applies to any costs incurred due to local statutes or governmental regulations.
- 6. Orders are not subject to cancellation by buyer except by written agreement with seller. Any order cancelled, after any work has been done by Rohn, such as engineering, production, etc., will have a cancellation charge, to be determined solely at the discretion of Rohn for whatever work has been performed with a minimum of 10% of the purchase order price. If customer so chooses, he shall have the right to receive the material already performed at time of cancellation at the quoted price. If an order is cancelled before any work has been done by Rohn, a \$200 cancellation charge will apply.
- 7. Material received may not be returned by buyer except by written agreement with seller. In all cases, permission must be secured from Rohn prior to the returning of any goods for credit. All returned goods are subject to a minimum service charge of 20%, plus all transportation charges, and are subject to inspection by Rohn. Returned goods will be offered and paid for only upon proof of purchase (i.e. invoice no.) and credit will be issued against invoice value. Rohn reserves the sole right to determine amount of credit to be issued on all goods returned for credit. Only standard, currently manufactured Rohn products may be considered for return and credit. Unsaleable products will be scrapped and no credit will be received. If returned goods are determined to have no value and buyer wishes them returned, the buyer will be charged return freight.
- 8. Rohn warrants the commercial items of its manufacture only, to be reasonably fit for the purpose for which they are manufactured and sold, provided, however, that this warranty shall be effective only if purchaser installs all material according to Rohn's recommendations and specifications and that purchaser during the warranty period shall regularly, not less than semi-annually, inspect and properly maintain all items. Any item found unfit for its purpose within 12 months from date of delivery will be repaired or replaced free of charge, F.O.B. Rohn's plant. Rohn shall be immediately notified in writing of such unfitness.

Rohn reserves the sole right to determine if any material is to be repaired or replaced free of charge or to be supplied at Rohn's standard prices. Such obligation shall be limited to parts returned for inspection, properly packed and expenses prepaid, and providing inspection shall satisfactorily indicate defects.

The warranty herein made is in lieu of all other warranties and, except as expressly stated herein, Rohn does not make and there are no warranties or obligations of any kind or nature whatsoever either expressed or implied including, but not restricted to, warranty or obligations as to design, material, workmanship, or manufacture or as to the use of the items covered hereby. Rohn shall not under any circumstances be liable to third persons for any claims or damages including direct, special, indirect, or consequential damages for any reason. The buyer agrees to indemnify and to hold Rohn harmless for, of, and from any loss, claims, damages, expenses and attorney's fees, including but not limited to, any fines, penalties and corrective measures Rohn may sustain by reason of the Buyer's failure to comply with said laws, rules, and regulations in connection with the performance of this sale.

The above Warranty applies only to items manufactured by Rohn. Items not manufactured by Rohn are warranted and guaranteed only to the extent and in the manner warranted and guaranteed to Rohn by the manufacturer of such items and then only to the extent Rohn is liable to enforce such warranty or guaranty.

Rohn will assume no responsibility for the adequacy of any product if material is used which is not totally supplied by Rohn.

The above sets forth the only warranty made by Rohn in connection with items manufactured or sold by it, and any provisions in any proposals, specifications, advertising, or other provisions hereof, are merely descriptive and are not to be construed as warranties made by Rohn.

All warranties are void on drawings made by others, whether by a professional engineer, sealed or not, that are not rechecked by Rohn and approved by Rohn. Rohn assumes no liability for the adequacy of the drawings or the design.

- 9. Rohn reserves the right to change or modify the design and construction of any product manufactured by Rohn and to substitute material equal to or superior to that originally specified.
- 10. Buyer agrees not to disclose or make available to any third party designs, processes, drawings, specifications, reports, photographs, data, and other technical or proprietary information relating to Rohn products without obtaining prior written consent of Rohn.
- 11. No proposal, order, quotation, or acceptance may be changed or varied by verbal agreement, and all orders are accepted only under the provisions set forth herein.
- 12. Purchase orders and requests for quotations must be submitted in writing to Rohn.
- 13. If outside source inspection, assembly, etc. is required prior to shipment of an order, \$50.00 per man hour (plus equipment time, if applicable) is chargeable, with \$300.00 as a minimum.
- 14. Any welding inspection required by customer or customer's specifications must be done at Rohn's plant prior to packing and shipment of material from Rohn's plant.
- 15. A minimum charge of \$25.00 will be billed for special handling and preparation of material for air shipments.
- 16. Rohn reserves the right to apply all remittances and credit memos to the oldest outstanding balance in your account. No credits will be issued for any reason against a purchase order whose billing is more than 90 days old. Customer corrections or complaints must be made within this period of time.
- 17. Standard catalog prices do not include special drawings or engineering stress analyses. If any are required, there will be a charge.
- 18. Rohn at all times reserves the right to take pictures of any or all of its products after installation for advertising purposes, except those Which are under classified governmental control.
- 19. The customer will be responsible for any extra charges incurred on prepaid shipments. Any F.O.B. order shipped from Reno, Dallas, Birmingham, Frankfort, or Bridgeport will incur a 10% inbound freight, plus 7% warehouse and handling charge, and will be shipped F.O.B. shipping point.
- 20. A service charge not to exceed 2% per month of maximum allowable per State law will be billed on all accounts not paid within 30 days of invoice date.
- 21. Minimum total net worth of merchandise which can be ordered is \$100.00. Any orders placed for less will be billed at \$100.00.
- 22. Any purchase order, which is placed under a "hold order" for over five (5) days by the customer for any reason, will be subject to a 1% per month storage charge, plus a 2% per month interest charge for a total of 3% per month, from the date of the hold until the order is released.
- 23. All CIA requirements must be met with certified checks or money orders to insure prompt shipment.
- 24. All expenses incurred by Rohn during any collection effort shall be charged to the customer.



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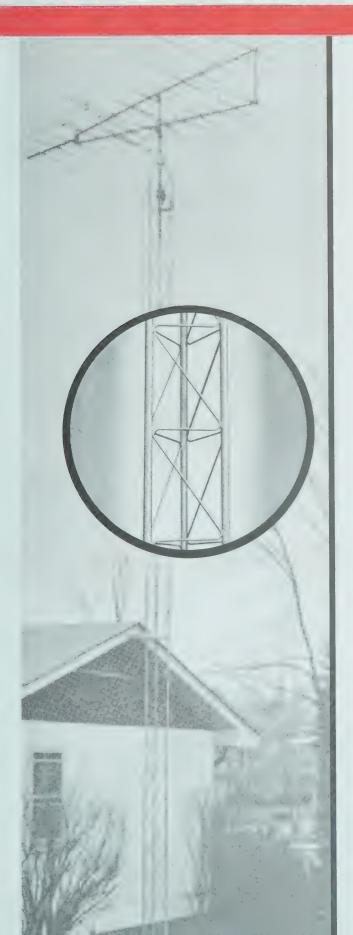
## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

## All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

# ROHN



### HOT DIP GALVANIZED

#### GENERAL USE

General Purpose Communication or Heavy-Duty TV Tower. The 25G will satisfy a tremendously wide range of tower needs.

### DESIGN

Built on a 12½" equilateral triangular design with continuous steel "zig-zag" cross-bracing entirely electric welded and fabricated in precision equipment. The 8 "zig-zag" braces per 10' section mean more than usual strength

### CONSTRUCTION

Unequalled Sturdiness . . . Extra heavy-duty 1½" steel tubing is used for side rails, resulting in far greater strength and sturdiness than ordinarily found in this size tower. SUPERIOR STRENGTH . . . has always been foremost in ROHN towers. This is achieved by setting rigid high standards for the steel used. These standards are constantly maintained by scientific testing according to accepted laboratory procedures so quality never varies! It's a natural conclusion that when quality ingredients are combined with precision manufacturing and proven design the result is a higher quality product!

#### FINISH

Famous ROHN Hot-Dip Galvanized long-life finish . . . the most durable coating ever known. Rust-proofs and gives an always attractive appearance. Every inch, including inside of entire tower, evenly and completely covered with zinc after fabrication

#### **ENGINEERING DATA**

ROHN superior engineering means advanced design . . . this results in the best tower for the needs of today! This is proven because here is a tower at least 33% stronger and more durable than similar size and type towers found on the market today. At the same time, the ROHN production system means lower costs . . . giving you a tower actually costing less than inferior towers. Get the best . . . look at the No. 25G carefully and you'll agree.

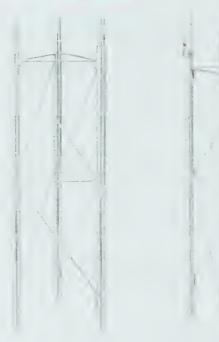
### SPECIAL FEATURES

The No. 25G uses double-bolted joints... proven the best method of joining tower sections for sturdiness and dependability. The extra strength of the No. 25G allows it to be self-supporting provided a house bracket is used and can go 35 feet above this bracket under normal conditions. (see instruction sheet) Under most guyed conditions the No. 25G is suitable to heights of 200 feet! Where special conditions or unusual antenna loading requirements must be met, we suggest you contact the Sales Department for complete information. Assembly bolts and nuts are located within 1 leg of each tower section.

ROHN,

6718 W. Plank Road P.O. Box 2000 Peoria, IL 61656 TWX: 910-652-0646 FAX: 309-697-5612 PHONE: 309-697-4400

## BASES



SB25G 3'4" SHORT BASE section for concrete



SBH25G\* 3'4'' HINGED SHORT BASE section for concrete



DR25G \* 2' DRIVE RODS set of 3

DT25 DRIVE TOOL for DR 25G



BP25G\*
BASE PLATE
(for use with drive rods)



BPH25G\*
HINGED BASE PLATE
for concrete



BPC25G\*
CONCRETE BASE PLATE



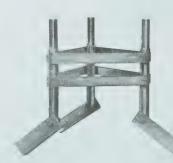
20BG 3' TOP SECTION



FR25G\*
FLAT ROOF MOUNT



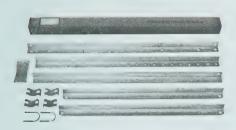
SDB25G\* SINGLE DRIVE-IN BASE



PR25G\*
PEAK ROOF MOUNT



## **BRACKETS**



HBU UNIVERSAL HOUSE BRACKET



EB2525G UNIVERSAL EAVE BRACKET



HB25AG 0-15"

HB25BG 0-24"
(not shown)

HB25CG 0-36"
(not shown)

ADUSTABLE HOUSE BRACKET



with torque bars

GB25G
GUY BRACKET ONLY
without torque bars

GA25G GUY ASSEMBLY

## SAFETY



SR 245 SAFETY RING

WP25G

WORK PLATFORM



For lifting 1 - 10' section at a time

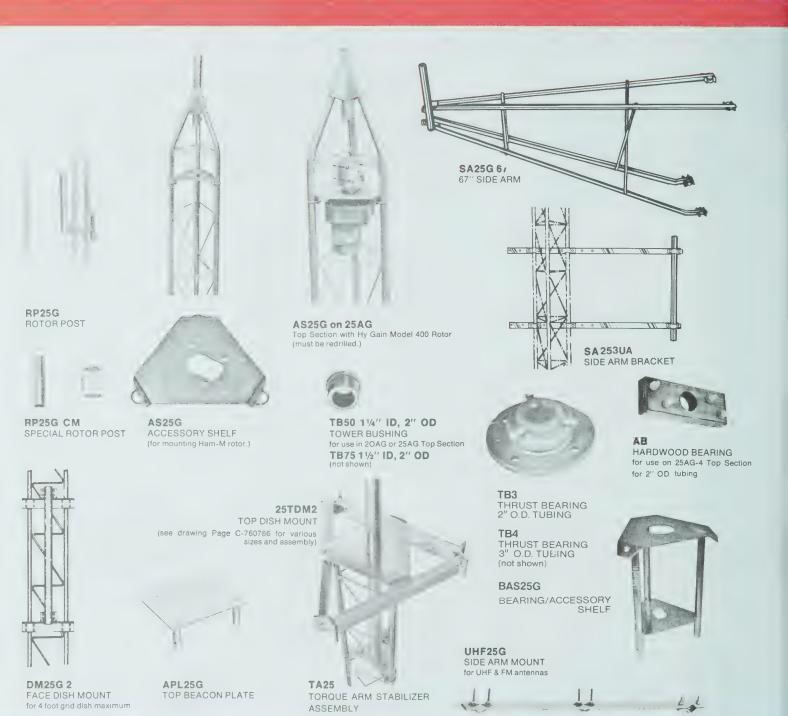
EF 25 45 ERECTION FIXTURE

2-1/2" sheave with %" I.D. groove



25ACL ANTI-CLIMB SECTION

## **ACCESSORIES**



### ADDITIONAL INFORMATION

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

All towers and masts should be installed and dismantled by experienced and trained personnel.
All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safely and proper performance

All antenna installations must be grounded per local and national codes.

The mising of so-called interchangeable copies of RONN products is dangerous and voids all engineering or warranty data supplied by RONN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by RONN to conform to the same quality at a supplied by the so-called copies are not the same quality standards. Mixing of non-RONN items may endanger the lives of your customers and cause serious lower failures and financial misfortune for all

#### #25 TOWER

PART NUMBER		WT.
25G	10' tower section	4.0
20BG	3' top section for use as home TV top section	40
25AG	9' top section for use as home TV top section	8-1/2 31
/ ST25AG /	5' short top section for use as home TV top section	18
/ 25AG1 /	Top section for use with communication antenna. Mast support tube is 1-1/4" galv. pipe, threaded on top and projecting 12" above apex of side rails.	31
25AG2	Top section for use with communication antenna. Mast support tube is 2-1/4" O.D.	31
25AG3	tubing, 36" total length, extending 18" above apex of side rails.  Top section for use with communication antenna. Mast support tube is 2-1/4" O.D.  tubing, extending 12" above apex of side rails. A 2" O.D. antenna stub will fit snugly inside support tube.	31
25AG4	8' top section for use with communication antenna. Upper end terminates in 11" dia. flat, circular plate with 2-1/4" dia. hole in center.	31
/ 25AG5 /	Top section for use with communication antenna. Mast support tube is 2-3/4" O.D. and 2-9/16" I.D. tubing, 18" total length.	31
25TG	10' tapered base section (sits on a pier pin - order pier pin separately)	60
*25 RG	10' insulator section for 25G tower (includes three #10470 post insulators)	74
25ACL	10' anti-climb section (for #25 and #20 towers)	115
/ 25ACL3 /	3 anti-climb metal sheets for attaching to tower section	65
25JBK	Joint bolt kit	1/2
APL25G	Beacon plate	14
SB25G	3'4" short base section for use in concrete	10
*SBH25G	3'4" hinged short base section for use in concrete	14
*SDB25G	Single drive base for use on top of ground	20
*BPC20G	Concrete base plate (sits on a pier pin - order pier pin separately)	13
*BPC25G	Concrete base plate (sits on a pier pin - order pier pin separately)	27
3/4x12PP	Pier pin (for BPC20G, BPC25G, or 25TG - one required)	1
*BPH25G	Hinged base plate for concrete	21
1/2X12BB	Concrete base bolt with double nuts (for BPH25G - four required)  Flat roof mount	1/2
*FR25G *PR25G	Peak roof mount	24
*BP25G	Base plate (for use with drive rods)	14 7
*DR25G	2' drive rods (set of 3)	6
DT25	Drive tool	1
RP25G	Rotor post	3
RP25GCM	Rotor post	2
AS25G	Accessory shelf. Triangular plate for mounting Ham "M" rotor or mast bearing. Mounts inside of tower. When using Model 400 Rotor, plate must be redrilled.	4
GA25G	Guy assembly (bracket with torque bars)	10
GB25G	Guy bracket only	6
HB25AG	Adjustable house bracket (0 to 15*)	8
HB25BG	Adjustable house bracket (0 to 24")	11
HB25CG	Adjustable house bracket (0 to 36")	17
HBU	Universal house bracket (6" to 30")	15
EB2525G	Eave bracket (universal)	7
TB50	Tower bushing for 25AG and ST25AG tops (1-1/4" I.D. x 2" O.D.)	1/2
TB75	Tower bushing for 25AG and ST25AG tops (1-1/2" I.D. x 2" O.D.)	1/2
AB	Amateur bearing for use with 25AG4 top (2" x 4" x 10" hardware)  Heavy duty thrust bearing, recommended for 2" O.D. tubing	1 2-1/2
TB3 TB4	Heavy duty thrust bearing, recommended for 3° 0.D. tubing	3
BAS25G	Bearing/accessory shelf section for mounting AB, TB3, or TB4 bearing and rotor	18
UHF25G	Side arm mount for UHF and FM antennas	4
SA253UA	Side arm assembly, 2-1/2' to 3' extension, with 2-1/4" O.D. support tube	28
SA25G67	67" side arm with 1-1/4" I.D. support tube for mounting TV receiving antenna	25
/**TA25 /	(not recommended and must be guyed to resist twist) Torque arm stabilizer assembly	35
/**25TDM2 /	Top dish mount w/2" O.D. mast (extends 2' above top plate)	40
/**25TDM2SP /	Top dish mount w/2" standard pipe (extends 3' above top plate)	50
/**25TDM2EH /	Top dish mount w/2" EH pipe (extends 3' above top plate)	60
/**25TDM25SP /	Top dish mount w/2-1/2" standard pipe (extends 3 above top plate)	65
/**DM25G2 /	Face dish mount w/2" (2-3/8" O.D.) 5" long standard pipe	42
WP 25G	Work platform (for #25 and #20 towers)	10
SR245	Safety ring	8
EF2545	Aluminum erection fixture, $12'$ long (fits all models with $1-1/4"$ side rails) (use to raise one $10'$ section at a time)	18
P2545	Pole only for EF2545	10
H2545	Head only for EF2545	8

\*Towers mounted on this base must be bracketed or guyed at all times.

\*\*This item is not to be used without proper design consideration.

### / Available by special order only. Allow 60 days for delivery. /

The #20 tower is not recommended for commercial, ham, CB or guyed installations.

NOTE: The price on \$25 sections will be higher on shipments to the following states: Arizona, California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming.

Refer to alphabetical/numerical price list for current prices.

#### REFERENCE SHEET AND ASSEMBLY INFORMATION

#25 BRACKETED TOWERS, NON-GUYED

(See Rohn Catalog for Guyed Tower Information)

INSTALLATION: Select a tower location sufficiently clear and out of falling distance of power lines since every electrical and telephone wire should be considered dangerous. The only safe distance from power lines is at least twice the height of tower, mast, and antenna. Tower should be installed by experienced and trained personnel. All antenna installations must be grounded per local or national codes.

<u>BASE</u>: The size of the hole for concrete placement for a 50 $^{\circ}$  \$25 tower, with a house bracket 12 $^{\circ}$  aboveground, is 3 $^{\circ}$  deep by 18 $^{\circ}$  square. For cases of loose soil, etc., the hole must be larger. Spread about 2 $^{\circ}$  of gravel in bottom of hole prior to setting short base or tower section. After setting short base or tower section on gravel, fill another 3" with gravel around legs. This allows the tower legs to extend the required amount below the bottom of the concrete, thus allowing for drainage of moisture into the gravel. The first 10' section should be leveled, plumbed, and temporarily guyed or braced while pouring the concrete. This will insure a plumb tower after installation. Check tower to assure it is plumb and level after pouring concrete. Do not pull tower up into the concrete to level it and do not drive it hard into ground as this plugs leg holes and prevents moisture drainage. Crown the top of the concrete slightly to prevent water accumulation. Do not use drive rods as a base for tower when set in concrete.

HEIGHT OF TOWER & BRACKET USES: House brackets must be used and must be mounted at least 12' aboveground to be The #25 tower should not extend more than 33' above a house bracket. (Note: Two house brackets are to be used, equally spaced, on the 80' tower.) To secure the house bracket, use lag screws no smaller than 3/8" x 2". A special effort must be made to locate the house bracket such that the lag screws go through the siding into a stud. Brackets fastened to the siding only will not hold. Tighten the house bracket U-bolts only enough to prevent looseness. Do not dent or flatten the tower upright members by excessively tightening U-bolts.

BOLTS: Nuts and bolts are located in tower legs. Installers are urged to use a 10" lining-up punch that tapers from about 1/2" to 5/32" diameter over a 6-1/2" length. If bolts cannot be pushed through the holes with the heel of the hand while rocking the tower, do not hammer them through. Carefully drive the punch into the hole just enough to slightly enlarge it. The leg bolt hole should be just large enough to admit the bolt. Never drill out the holes. Be sure to tighten all leg bolts until they partially flatten the sleeves, causing the sleeves to actually grip the legs inside. Always replace stripped bolts. Upon completing an installation, there should be no vertical movement between tower sections at the joints when the tower is deliberately swayed from side to side.

MISCELLANEOUS: Installation is greatly hastened and simplified by the use of an erection fixture. Do not use it to lift more than the weight of one tower section at a time. Anti-climb sections are recommended for all towers to prevent unauthorized persons from climbing tower.

CAUTION: ... Be sure hinge bolts on hinged type accessories are loosened before attempting to hinge tower up or down. Hinge no more than 33' of #25 tower only. All hinged type bases are recommended to be used to raise tower only without antenna. When raising and lowering tower on any type of hinge base or hinge section, the loads applied for hinging the tower must be applied equally on both sides of tower in order to reduce the possibility of twist on tower and hinges at the base. Special care must be taken to avoid the use of raising and lowering methods which may cause damage to tower or hinges. Hinged bases should only be installed and dismantled by professional and experienced installers.

All information is based upon antennas with not more than 2 square feet of area in a 20 psf (70 mph) wind load and a safety factor, with antenna installed at tower apex.

Our catalog information excludes roof installations. Local engineers must be consulted to determine adequate base and anchor details for all roof type installations.

NOTE: All types of antenna installations should be thoroughly inspected by qualified personnel at least twice a year and remarked with hazard and warning labels to insure safety and proper performance. A safety package (part number ACWS) is available which includes one anti-climb warning sign and two Danger - Watch for Wires labels along with other printed safety information.

Dismantling of any tower should be done by professional and experienced installers a section at a time with the use of an erection fixture. Temporary steel guys may be necessary at the 10' level.

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25G030BRKT	301	Complete	Bracketed	Tower
25G040BRKT	40'	Complete	Bracketed	Tower
25G050BRKT	50'	Complete	Bracketed	Tower
25G060BRKT	601	Complete	Bracketed	Tower
25G070BRKT	70'	Complete	Bracketed	Tower
25G080BRKT	801	Complete	Bracketed	Tower

Refer to alphabetical/numerical price list for Reference Sheet Prices on Complete #25G bracketed Towers.

ROHN

#### Assembly Information

#### Bracketed #20 and #25 Towers, Non-Guyed

(See Rohn Catalog for Guyed Tower Information)

SITE SELECTION: Select a tower location sufficiently clear and out of falling distance of power lines since every electrical and telephone wire should be considered dangerous. The only safe distance from power lines is at least twice the height of tower, mast, and antenna combined. Tower should be installed and dismantled by experienced and trained personnel. All antenna installations must be grounded per local or national codes.

BASE: The size of the hole for concrete placement for a bracketed #20 tower, with a house bracket 12' aboveground, is 3' deep by 18" square. The hole for a bracketed #25 tower is 3' deep by 18" square. For cases of loose soil, etc., the hole must be larger. Spread about 2" of gravel in bottom of hole prior to setting short base or tower section. After setting short base or tower section on gravel, fill another 3" with gravel around legs. This allows the tower base legs to extend the required amount below the bottom of the concrete, thus allowing for drainage of moisture into the gravel. The first 10' section should be leveled, plumbed, and temporarily guyed or braced while pouring the concrete. This will insure a plumb tower after installation. Check tower to assure it is plumb and level after pouring concrete. Do not pull tower up into the concrete to level it and do not drive it hard into ground as this plugs leg holes and prevents moisture drainage. Crown the top of the concrete slightly to prevent water accumulation. Do not use drive rods as a base for tower when set in concrete.

HEIGHT OF TOWER & BRACKET USES: House brackets must be used and should be mounted at least 12' above-ground to be effective. The \$20 tower should not extend more than 28' (maximum) above a house bracket and the \$25 tower should not extend more than 33' (maximum) above a house bracket. (Note: Two house brackets are to be used, equally spaced, on the 80' \$25 tower.) To secure the house bracket, use lag screws no smaller than 3/8" x 2". A special effort must be made to locate the house bracket such that the lag screws go through the siding into a stud. Brackets fastened to the siding only will not hold. Tighten the house bracket U-bolts only enough to prevent looseness. Do not dent or flatten the tower upright members by excessively tightening U-bolts.

BOLTS: Nuts and bolts are located in tower leg. Installers are urged to use a 10 lining-up punch that tapers from about 1/2 to 5/32 diameter over a 6-1/2 length. If bolts cannot be pushed through the holes with the heel of a hand while rocking the tower, do not hammer them through. Carefully drive the punch into the hole just enough to slightly enlarge it. The leg bolt hole should be just large enough to admit the bolt. Never drill out the holes. Be sure to tighten all leg bolts until they partially flatten the sleeves, causing the sleeves to actually grip the legs inside. Always replace stripped bolts. Upon completing an installation, there should be no vertical movement between tower sections at the joints when the tower is deliberately swayed from side to side.

MISCELLANEOUS: Installation is greatly hastened and simplified with the use of an erection fixture. Do not use it to lift more than the weight of one tower section at a time. If the antenna is to be fixed and a set screw used in the mast housing, or if a rotator is to be mounted on a short length of mast above the tower top section, install a TB50 tower bushing at bottom of the mast housing to center the mast in the mast housing. These bushings are "peened" in place. If the rotator is to be mounted inside the top section of the tower, do not install a TB50 tower bushing at bottom of mast housing. Anti-climb sections are recommended on all towers to prevent unauthorized persons from climbing tower.

CAUTION ... Be sure hinge bolts on hinged type accessories are loosened before attempting to hinge tower up or down. Hinge no more than 33' of #25 or 28' of #20 tower only. All hinged type bases are recommended to be used to raise tower only without antenna. When raising and lowering tower on any hinged type base or hinge section, the loads applied for hinging the tower must be applied equally on both sides of the tower in order to reduce the possibility of twist on tower and hinges at the base. Special care must be taken to avoid the use of raising and lowering methods which may cause damage to tower or hinges. Hinged bases should only be installed and dismantled by professional and experienced installers.

Our catalog information excludes roof installations. Local engineers must be consulted to determine adequate base and anchor details for all roof type installations.

All types of antenna installations should be thoroughly inspected by qualified personnel at least twice a year and remarked with hazard and warning labels to insure safety and proper performance. A safety package (part number ACWS) is available which includes one anti-climb warning sign and two Danger - Watch for Wires labels along with other printed safety information.

Dismantling of any tower should be done by professional and experienced installers a section at a time with the use of an erection fixture. Temporary steel guys may be necessary at the 10' level.

All information is based upon average antennas, with no more than 2 square feet of area in a 20 psf (70 mph) wind load and a safety factor, with antenna installed at tower apex.

"WARNING: INSTALLING OR DISMANTLING THIS PRODUCT NEAR POWER LINES IS DANGEROUS. FOR YOUR SAFETY, FOLLOW THE SAFETY DIRECTIONS."

### INSTALLATION AND DISMANTLING SAFETY INSTRUCTIONS -- YOU, YOUR ANTENNA, AND SAFETY

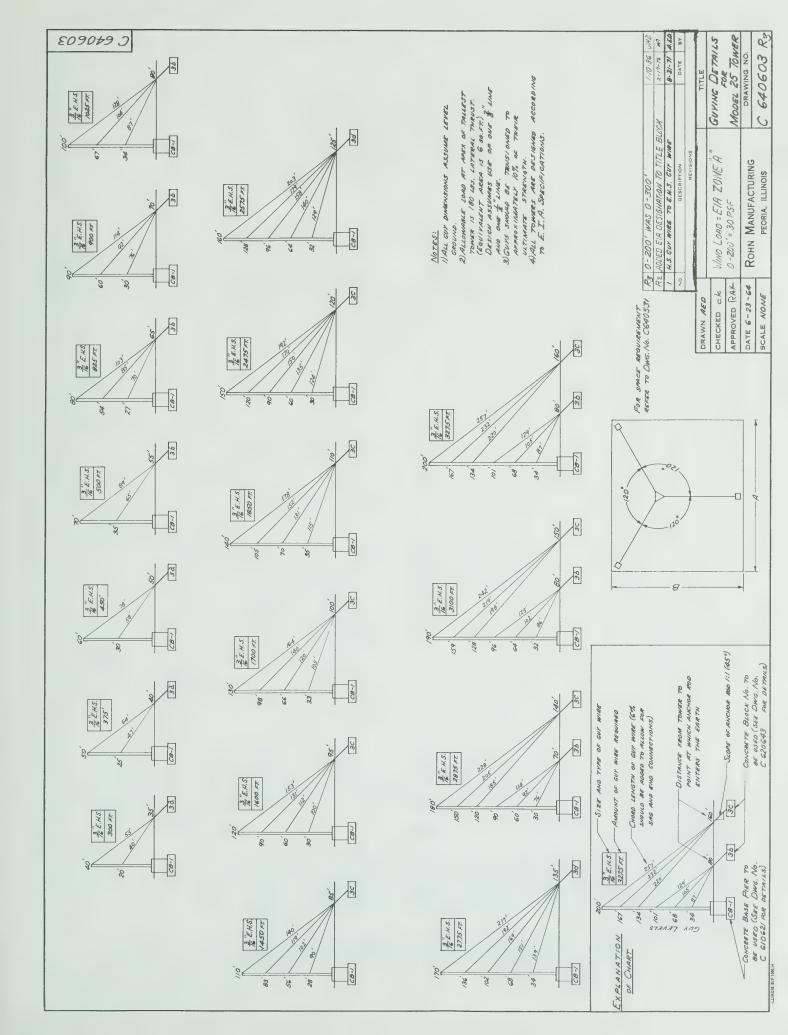
Each year hundreds of people are killed, mutilated, or receive severe permanent injuries when attempting to install or dismantle an antenna. In many of these cases, the victim was aware of the dangers of electrocution but did not take adequate steps to avoid the hazard.

For your safety and to help you achieve a SAFE installation, please READ and FOLLOW the safety precautions below. THEY MAY SAVE YOUR LIFE!

- 1. If you are installing or dismantling an antenna for the first time, please, for your own safety as well as others, seek PROFESSIONAL ASSISTANCE. Consult your dealer. He can explain which mounting or dismantling method to use for the size and type antenna you are about to install or dismantle.
- 2. Select your installation site with safety, as well as performance, in mind. (See information on Site Selection.) REMEMBER: POWER LINES AND PHONE LINES LOOK ALIKE. FOR YOUR SAFETY, ASSUME THAT ANY OVERHEAD LINES CAN KILL YOU.
- 3. Call your power company. Tell them your plans and ask them to look at your site. This is little inconvenience, considering YOUR LIFE IS AT STAKE.
- 4. Before you begin, plan your installation or dismantling procedure carefully. Successful installation or dismantling of a mast or tower is largely a matter of coordination. Each person should be assigned to a specific task and should know what to do and when to do it. One person should be designated as the "boss" to call out instructions and watch for signs of trouble.
- 5. When installing or dismantling your antenna, REMEMBER: DO NOT use a metal ladder. DO NOT work on a wet or windy day or if a thunderstorm is approaching. DO dress properly—shoes with rubber soles and heels, rubber gloves, long sleeve shirt or jacket.
- 6. If the assembly starts to drop, get away from it and let it fall. REMEMBER: The antenna, mast, cable, and metal guy wires are all excellent conductors of electrical current. Even the <u>slightest touch</u> of any of these parts to a power line completes an electrical path through the antenna and the installer -- THAT'S YOU!
- 7. If any part of the antenna system should contact a power line -- DON'T TOUCH IT OR TRY TO REMOVE IT YOURSELF. CALL YOUR LOCAL POWER COMPANY. They will remove it safely.
- 8. If an electrical accident should occur -- DON'T grab hold of the person in contact with the power line or you too will be electrocuted. Use a DRY board, stick or rope to push or pull the victim away from the antenna. If the victim has stopped breathing, administer artificial respiration -- and stay with it. Have someone call for medical help.

SITE SELECTION: Before attempting to install your antenna, think where you can best place your antenna for safety and performance. To determine a safe distance from wires, power lines, and trees: 1) Measure the height of your antenna; 2) Add this length to the length of your tower or mast; and then, 3) Double this total for the minimum recommended safe distance.

If you are unable to maintain this safe distance, STOP! GET PROFESSIONAL HELP. Generally, the higher the antenna is aboveground, the better it performs. Good practice is to install your antenna above the roof line and away from power lines and obstructions. Remember that the FCC limits your CB antenna height. If possible, find a mounting place close to your set, where the antenna wire can take a short, vertical drop on the outside of the house for entry through a wall or window near the set. Your dealer carries a complete line of installation and grounding hardware.



### PARTS LIST #25G GUYED TOWER

Zone "A" Wind Load

6 Sq. Ft. of Allowable Load

Tower			BPC25G with 3/4"x12"	APL25G		G.W. 3/16"	C.C.M.	TH.	T.B. 3/8"x6"	GAC	GAC
Height	25G	25AG2	PP	SA253UA	GA25G	E.H.S.	3/16"	1/4"	E&E	253	255
40 '	3	1	1		2	300 <b>'</b>	36	12	6	3	
50 <b>'</b>	4	1	1		2	375'	36	12	6	3	
60 <b>'</b>	5	1	_ 1		2	450'	36	12	6	3	
70 <b>'</b>	6	1	1		2	500'	36	12	6	3	
80'	7	1	1		3	825	54	18	9	3	
90'	8	1	1		3	900'	54	18	9	3	
100'	9	1	1		3	1100'	54	18	9	3	
110'	10	1	1		4	1500'	72	24	12		3
120'	11	1	1		4	1600'	72	24	12		3
130'	12	1	1		4	1700'	72	24	12		3
140'	13	1	1		4	1850'	72	24	12		3
150'	14	1	1		5	2500'	90	30	15		3
160'	16		1	1	5	2575'	90	30	15		3
170'	17		1	1	5	2775'	90	30	15		3
180'	18		1	1	6	2875'	108	36	18	6	
190'	19		1	1	6	3100'	108	36	18	6	
200'	20		1	1	6	3275	108	36	18	6	

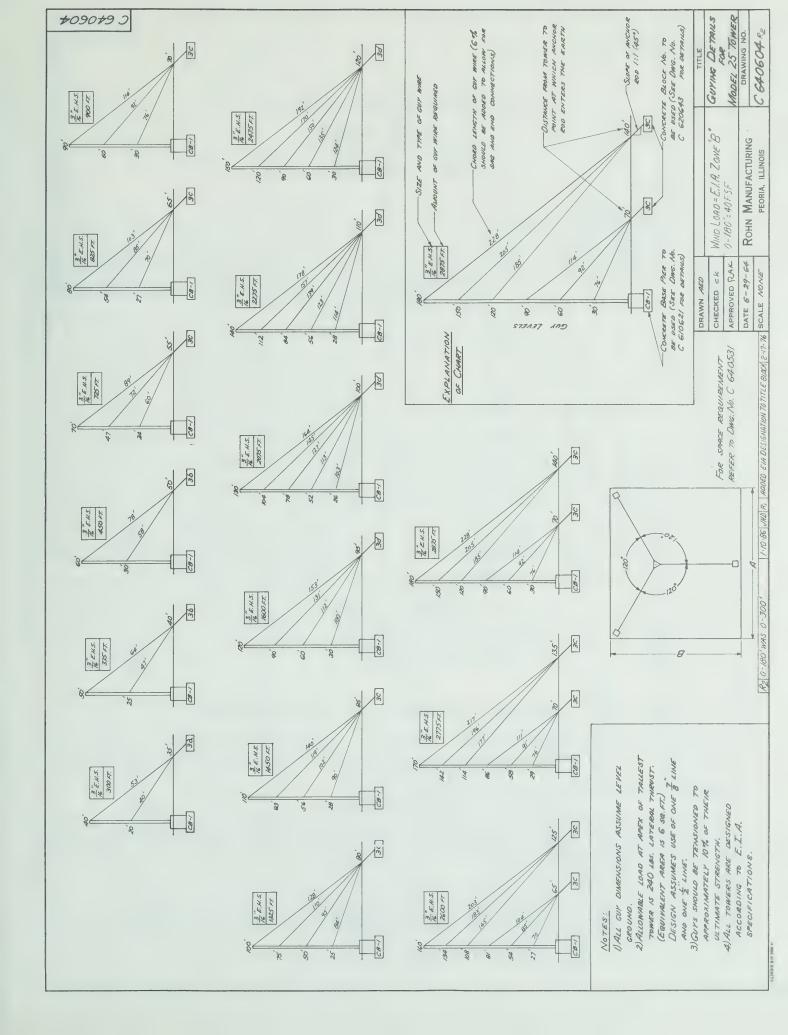
Items shown above are necessary for complete "ground" guyed towers.

For "roof" towers a flat roof mount (FR25G) is substituted for the concrete base plate (BPC25G) and wall anchors (GAWP25) are substituted for the concrete anchors (GAC25).

When ordering specify "roof" or "ground".

Anchor grounding (AGKE) and base grounding (BGKE), as recommended by EIA, are included in tower material. However, extra copper wire may be required for roof installations. See appropriate sheet for grounding material and order extra copper wire as a separate item.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.



### PARTS LIST #25G GUYED TOWER

Zone "B" Wind Load

6 Sq. Ft. of Allowable Load

Tower Height	25G	25AG2	BPC25G with 3/4"x12" PP	APL25G and SA253UA	GA25G	G.W. 3/16" E.H.S.	C.C.M. 3/16"	TH.	T.B. 3/8"x6" E&E	GAC 253	GAC 255
40'	3	1	1		2	300'	36	12	6	3	
50 <b>'</b>	4	1	1		2	375 <b>'</b>	36	12	6	3	
60'	5	1	1		2	500'	36	12	6	3	
70 <b>'</b>	6	1	1		3	725'	54	18	9	3	
80'	7	1	1		3	825'	54	18	9	3	
90'	8	1	1		3	900'	54	18	9	3	
100'	9	1	1		4	1325'	72	24	12		3
110'	10	1	1		4	1500'	72_	24	12		3
120'	11	1	1		4	1600'	72	24	12		3
130'	12	1	11		5	2125'	90	30	15		3
140'	13	1	1		5	2275'	90	30	15		3
150 <b>'</b>	14	1	1		5	2500'	90	30	15		3
160'	16		1	1	6	2600'	108_	36	18	6	
170'	17		1	1	6	2775'	108	36	18	6	
180'	18		1	1	6	2875	108	36	18	6	

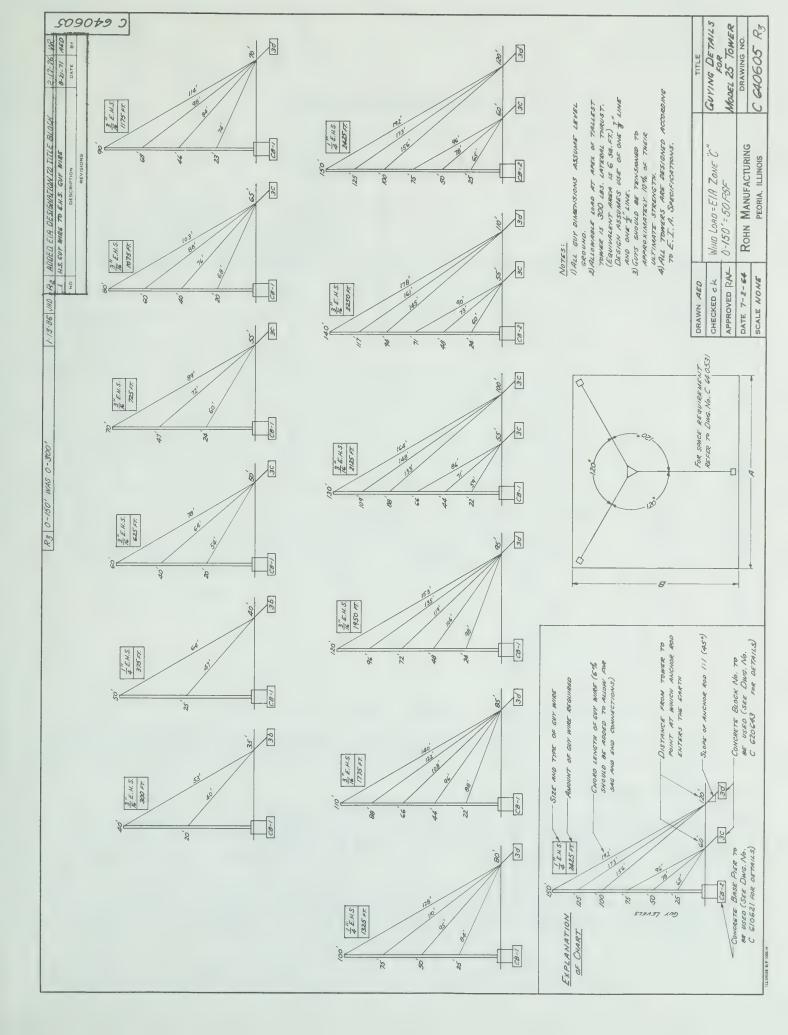
Items shown above are necessary for complete "ground" guyed towers.

For "roof" towers a flat roof mount (FR25G) is substituted for the concrete base plate (BPC25G) and wall anchors (GAWP25) are substituted for the concrete anchors (GAC25).

When ordering specify "roof" or "ground".

Anchor grounding (AGKE) and base grounding (BGKE), as recommended by EIA, are included in tower material. However, extra copper wire may be required for roof installations. See appropriate sheet for grounding material and order extra copper wire as a separate item.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.



Zone "C" Wind Load

6 Sq. Ft. of Allowable Load

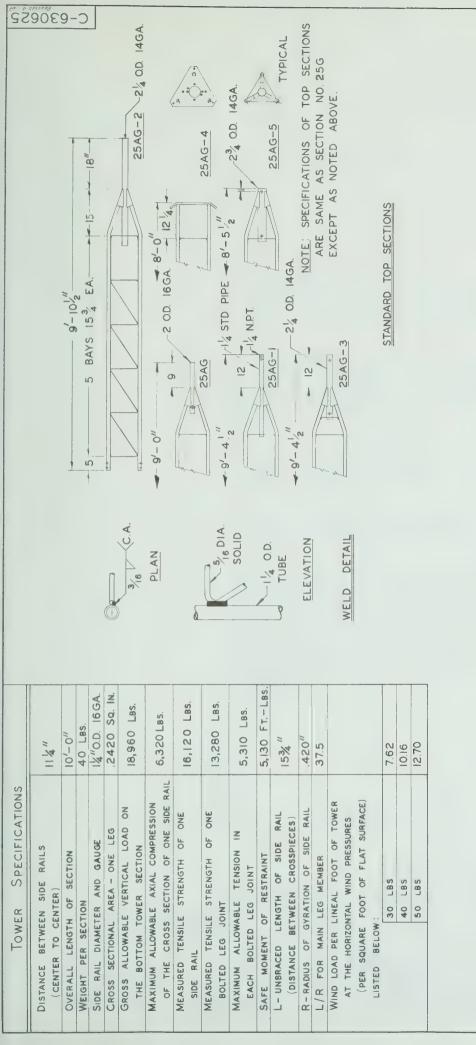
Tower Height	25G	25AG2	BPC25G with 3/4"x12" PP	GA25G	G.W. 3/16" EHS	G.W. 1/4" EHS	C.C.M. 3/16"	C.C.M.	TH.	T.B. 3/8"x6" E&E	T.B. 1/2"x12" E&E	GAC 253	GAC 255
40'	3	1	1	2	300'		36		12	6		3	
50'	4	1	1	2		375'		36	12		6	3	
60'	5	1	1	3	625'		54		18	9		3	
70'	6	1	1	3	725'		54		18	9		3	
80'	7	1	111	4	1075'		72		24	12			3
90'	8	1	1	4	1175'		72		24	12			3
100'	9	1	1	4		1325'		72	24		12		3
110'	10	1	1	5	1775'		90		30	15			3
120'	11	1	1	5	2000'		90		30	15			3
130'	12	1	1	6	2125'		108		36	18		6	
140'	13	1	1	6	2250'		108		36	18		6	
150'	14	1	1	6		2425'		108	36		18	6	

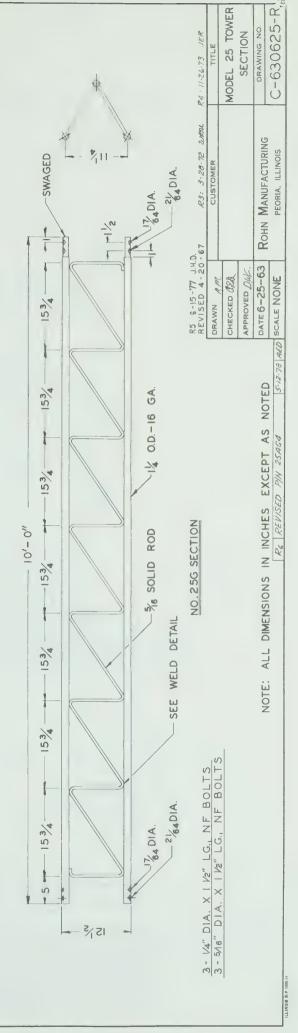
Items shown above are necessary for complete "ground" guyed towers.

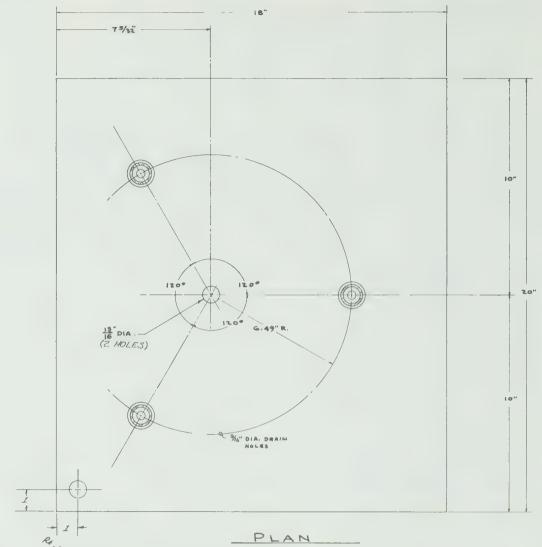
For "roof" towers a flat roof mount (FR25G) is substituted for the concrete base plate (BPC25G) and wall anchors (GAWP25) are substituted for the concrete anchors (GAC25).

When ordering specify "roof" or "ground".

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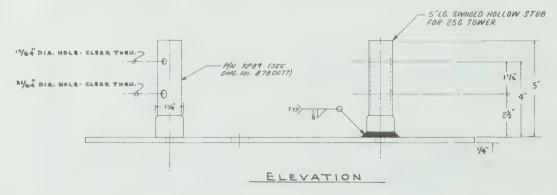




PLAN

NOTE: DUE TO VARIABLES INVOLVED IN ROOF AND OTHER INSTALLATIONS, IT SHALL BE
THE CUSTOMER'S OR INSTALLER'S RESPONSIBILITY TO PROVIDE STRUCTURALLY
ADEQUATE SUPPORTS FOR PIER & ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY
FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER
TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.

5"IG SWAGED HOLL



#### BASE PLATE FOR CONCRETE PIER (BPC 25G)

NOTE:			RI REVISED	3-22-73 D.M. 6-5-64 C.H.
FOR USE WITH GUYED AND BRACKETED TOWERS ONLY.	[	DRAWN ck	CUSTOMER	TITLE
	31-78 WSG	CHECKED RAK		BASE PLATE
RS CHANGED STUB FROM 16 GA. TO 14 GA, ADDED PA 7-26	76-78 AED 1	APPROVED ck		MODEL 25 TOWER
R4 ADDED NOTE 7-6-	5-76 PH	DATE 8-31-G1	ROHN MFG.	DRAWING NO.
R3 REVISED STUBE ADDED WELD SYMBOL 1-9 R2 ADDED NOTE & REMOVED SCALE 11-26	9-13 RUB		PEORIA, ILLINOIS	C-610831Rs
	- DIOLA			

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

### All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

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# ROHN.NO.45G COMMUNICATION

# TOWER

This tower is an 18 inch triangular pattern suitable for heights to 300 feet with proper guying!

A true multi-use tower.



ROHN No. 45 tower is designed in an 18 inch equilateral triangular pattern. The three legs of the tower are either heavy, 14 gauge, special quality steel tubing or solid steel bars. The cross bracing is the ROHN "zig-zag" design using a continuous, solid steel rod, electric welded to side rails every 15 inches. All sections are 10 feet in length.

#### USAGE

This tower is suitable for mounting communication antennas or other equipment under normal conditions for heights up to a maximum of 300 feet. See specification sheets for complete guying and wind load information.

#### CONSTRUCTION

Entire tower is accurately constructed, utilizing precision machines and then electric welded throughout. Workmanship and materials are of the highest quality available and fully conforming to specifications.

#### **FINISH**

ROHN No. 45 tower sections are completely hot dip galvanized *after fabrication* to give permanent protection against corrosion. Because sections are galvanized as the last operation, all points of welding and other points of construction are fully covered with molten zinc that tends to seal itself should there ever be any breakage on the surface!

Do not install towers or masts near power lines. All towers or masts should be installed out of falling distance of power lines since every electrical and telephone wire should be considered dangerous.

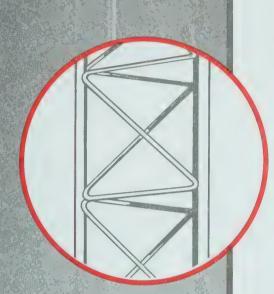
UNR-Rohn recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

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All antenna installations must be grounded per local or national codes.

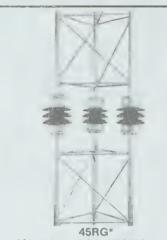
The mixing of so-called interchangeable copies of Rohn towers with Rohn towers is dangerous and voids all engineering or warranty data supplied by UNR-Rohn. Materials used by the so-called copies are not the same quality and have not been tested or engineered by UNR-Rohn to conform to the same quality standards. Mixing of non-Rohn items may endanger the lives of your customers and cause servous tower failures and financial misfortune for all concerned



# ROHN NO. 45G TOWER ACCESSORIES



**BPL45G WITH TB3 THRUST BEARING** TB4 THRUST BEARING W/ 3" O.D.



10' INSULATOR SECTION





RP45G ROTOR POST SB45G 5' SHORT BASE (for concrete)







AB AMATEUR BEARING (for use with 45AG4 Top Section and BPL45G)



UNIVERSAL HOUSE BRACKET

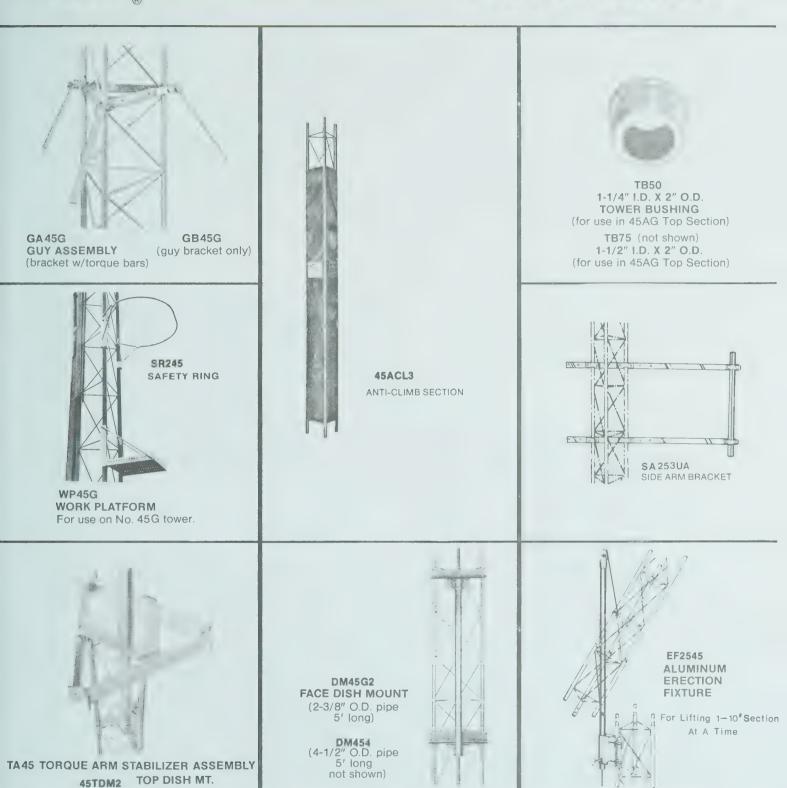


\*NOTE:

TOWERS MOUNTED ON THESE BASES MUST BE BRACKETED OR GUYED AT ALL TIMES. TEMPORARY STEEL GUYING MAY ALSO BE NECESSARY DURING INSTALLATION OR DISMANTLING. COPYRIGHT 1986 ROHN. ALL RIGHTS RESERVED. SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

All ROHN No. 45G Tower Accessories are Hot Dip Galvanized after fabrication.

# ROHN NO. 45G TOWER ACCESSORIES



## ROHN. IN-HOUSE

### "Quality Control" Galvanizing

### means extra value for you!

corrosion-resistant. A minimum molten zinc coating of 2 ounces for every square foot of surface fuses permanently to the metal, becoming an actual part of the steel so it cannot be separated. Also the tubular steel used in ROHN Towers is coated both inside and outside to give absolute protection against deterioration from condensation and moisture.

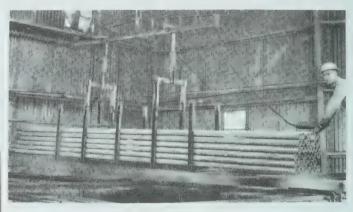
CHIP AND SCRATCH PROOF: If a galvanized surface is scratched or chipped, the surrounding

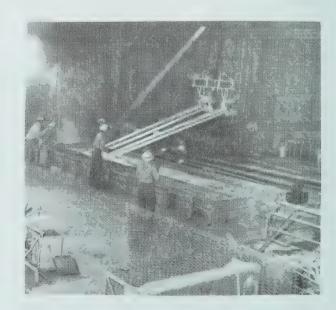
Shown here are the huge pickling vats at ROHN where towers and other ROHN Products are prepared for galvanizing. Modern, high capacity equipment, skilled, experienced operators and finest raw materials keep ROHN quality high.

ROHN tower sections after fabrication are completely immersed in the molten zinc where all welds, points of construction, inner parts, including the interior of the tubing itself — is heavily coated with zinc.

zinc actually "heals the wound" and continues to seal out all corrosive elements! Nothing but hop dip galvanizing does this.

PERMANENT DURABILITY: Galvanizing means permanent protection and attractive appearance that cannot be matched by any other type of coating. With ROHN Products, you receive the very finest available—anywhere. All Hot Dip Galvanizing is done in the ROHN Galvanizing Plant according to ROHN Rigid Controls for Highest Quality.







6718 W. Plank Road P.O. Box 2000 Peoria, IL 61656 TWX: 910-652-0646 FAX: 309-697-5612 PHONE: 309-697-4400

#### #45 TOWER

PART NUMBER		WT.
45G	10' tower section	
45AG	9' top section	70 52
/ 45AG1 /	Top section. Mast support tube is 1-1/4" galv. pipe, threaded on top and projecting 12" above apex of side rails.	60
45AG2	Top section. Mast support tube is 2-3/8" O.D. tubing, 36" total length, extending 18" above apex of side rails.	60
45AG3	Top section. Mast support tube is 2-1/4" O.D. tubing, extending 12" above apex of side rails. A 2" O.D. antenna stub will fit snugly inside support tube.	60
45AG4	7' top section. Upper end terminates in flat, triangular plate with 3-1/8" dia. hole in center.	52
/ 45AG5 /	Top section. Mast support tube is 2-3/4" O.D. and 2-9/16" I.D. tubing, 18" total length.	60
45TG	10' tapered base section	90
*45RG 45ACL	10' insulator section for 45G tower (includes 3 #10470 insulators) 10' anti-climb section	104
/ 45ACL3 /	3 anti-climb metal sheets for attaching to tower section	165 100
5545G	20' adapter section for joining 45G and 55G sections	160
45JBK	Joint bolt kit	3/4
APL45G SB45G	Beacon plate	17
*BPC45G	5' short base section for concrete Concrete base plate	35
3/4X12PP	Pier pin (for BPC45G or 45TG - one required)	39 1
*BPH45G	Hinged base plate for concrete	53
1/2X12BB *FR45G	Concrete base bolt with double nuts (for BPH45G - four required) Flat roof mount	1/2
AS455G	Accessory shelf. Plate for mounting Ham "M" rotor or mast bearing.  Mounts inside of tower. When using Model 400 rotor, plate must be redrilled.	8
GA45G GB45G	Guy assembly (bracket with torque bars) Guy bracket only	20
HBU	Universal house bracket (6" to 30")	16 15
TB50	Tower bushing for 45AG top (1-1/4" I.D. x 2" 0.D.)	1/2
TB75	Tower bushing for 45AG top (1-1/2" I.D. x 2" 0.D.)	1/2
AB	Amateur bearing for use with 45AG4 top (2" x 4" x 10" hardware)	1
TB3 TB4	Heavy duty thrust bearing, recommended for 2" 0.D. tubing Heavy duty thrust bearing, recommended for 3" 0.D. tubing	2-1/2
BPL45G	Top plate with guy lugs for mounting AB, TB3 or TB4 bearing	3 17
SA253UA	Side arm assembly, 2-1/2' to 3' extension, with 2-1/4" support tube	28
SAB45G2	Discontinued (Replaced by SA253UA)	15
SA45G224	Discontinued (Replaced by SA253UA)	22
**T A45 /**45T DM2 /	Torque arm stabilizer assembly Top dish mount w/2" 0.D. mast (extends 3' above top plate)	56
/**45TDM2SP /	Top dish mount w/2" standard pipe (extends 5' above top plate)	60 80
/**45T DM2EH /	Top dish mount w/2" EH pipe (extends 5' above top plate)	85
7**45TDM25SP /	Top dish mount w/2-1/2" standard pipe (extends 5' above top plate)	90
7**45T DM25EH /	Top dish mount w/2-1/2" EH pipe (extends 5' above top plate)	110
DM45G2 DM454	Face dish mount w/2" (2-3/8" 0.D.) 5' long standard pipe Face dish mount w/4" (4-1/2" 0.D.) 5' long standard pipe	52
WP45G	Work platform	88 14
SR245	Safety ring	8
EF2545	Aluminum erection fixture, 12' long (fits all models with 1-1/4" side rails) (use to raise one 10' section at a time)	18
P2545	Pole only for EF2545	10
H25 <b>4</b> 5	Head only for EF2545	8

<sup>\*</sup>Towers mounted on these bases must be bracketed or guyed.

#### / Available by special order only. Allow 60 days for delivery. /

NOTE: The price on #45 and #5545G sections will be higher on shipments to the following states: Arizona, California, Colorado, Idaho, Montana, Newada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Refer to alphabetical/numerical price list for current prices.

<sup>\*\*</sup>This item is not to be used without proper design consideration.

#### REFERENCE SHEET & INSTALLATION INFORMATION

#### #45 BRACKETED TOWERS, NON-GUYED

INSTALLATION: Select a tower location sufficiently clear and out of falling distance of power lines since every electrical and telephone wire should be considered dangerous. The only safe distance from power lines is at least twice the height of tower, mast and antenna combined. Tower should be installed by experienced and trained personnel. All antenna installations must be grounded per local or national codes.

BASE: The size of the concrete base for a 50' #45 tower, with a house bracket 12' aboveground, is 3' deep by 2' square. For cases of loose soil, etc., the base must be larger. Spread about 2" of gravel in bottom of hole prior to setting base assembly. The base assembly should be attached to the first 10' section prior to setting into gravel. After setting base assembly on gravel, fill another 3" with gravel around legs of base. This allows the tower base legs to extend the required amount below the base of the concrete, thus allowing for drainage of moisture into the gravel. The base assembly and first 10' section should be leveled, plumbed, and temporarily guyed or braced while pouring the concrete. This will insure a plumb tower after installation. Check tower to assure it is plumb and level after pouring concrete. Do not pull base up into the concrete to level it and do not drive it hard into ground as this plugs leg holes and prevents moisture drainage. Crown the top of the concrete slightly to prevent water accumulation. Do not use drive rods as a base for tower when set in concrete.

HEIGHT OF TOWER & BRACKET USES: House brackets must be used and must be mounted at least 12' aboveground to be effective. The #45 tower should not extend more than 45' above a house bracket. (Note: Two house brackets are to be used, equally spaced, on the 80', 90', and 100' towers.) To secure the house bracket, use lag screws no smaller than 3/8" x 2". A special effort should be made to locate the house bracket such that the lag screws go through the siding into a stud. Brackets fastened to the siding only will not hold in a high wind. Tighten the house bracket U-bolts only enough to prevent looseness. Do not dent or flatten the tower upright members be excessively tightening U-bolts.

 $\overline{80}$ LTS: Installers are urged to use a 10" lining-up punch that tapers from about 1/2" to 5/32" diameter over a 6-1/2" length. If bolts cannot be pushed through the holes with the heel of the hand while rocking the tower, do not hammer them through. Carefully drive the punch into the hole just enough to slightly enlarge it. The leg bolt hole should be just large enough to admit the bolt. Never drill out the holes. Be sure to tighten all leg bolts until they partially flatten the sleeves, causing the sleeves to actually grip the legs inside. Always replace stripped bolts. Upon completing an installation, there should be no vertical movement between tower sections at the joint when the tower is deliberately swayed from side to side.

MISCELLANEOUS: Installation is greatly hastened and simplified by the use of an erection fixture. Do not use it to lift more than the weight of one tower section at a time. Anti-climb sections are recommended on all towers to prevent unauthorized persons from climbing tower.

CAUTION ... Be sure hinge bolts on hinged type accessories are loosened before attempting to hinge tower over. Hinge up no more than 45' of #45 tower only. All hinged type bases are recommended to be used to raise tower only without antenna. When raising and lowering tower on any type of hinge base or hinge section, the loads applied for hinging the tower must be applied equally on both sides of tower in order to reduce the possibility of twist on tower and hinges at the base. Special care must be taken to avoid the use of raising and lowering methods which may cause damage to tower or hinges. Hinge bases and roof mounted towers should only be installed by professional and experienced installers.

All information is based upon antennas with not more than 2 square feet of area in a 20 psf (70 mph) wind load and a safety factor, with antenna installed at tower apex.

Dismantling of any tower should be done by professional and experienced installers a section at a time with the use of an erection fixture.

See Chart B-691119 for more information on non-guyed towers.

 $\frac{\text{NOTE}}{\text{twice}}$ . All types of antenna installations should be thoroughly inspected by qualified personnel at least twice a year and remarked with hazard and warning labels to insure safety and proper performance.

PART NUMBER				
45G030BRKT 45G040BRKT 45G050BRKT 45G060BRKT 45G070BRKT 45G080BRKT	40' 50' 60' 70'	Complete Complete Complete	Bracketed Bracketed Bracketed Bracketed Bracketed Bracketed	Tower Tower Tower Tower
45G090BRKT 45G100BRKT	90 '	Complete	Bracketed Bracketed	Tower

Refer to alphabetical/numerical price list for Reference Sheet Prices on Completed #45G Bracketed Towers.

#### UNR-Rohn

#### Assembly Information

#### Bracketed #45 Tower, Non-Guyed

SITE SELECTION: Select a tower location sufficiently clear and out of falling distance of power lines since every electrical and telephone wire should be considered dangerous. The only safe distance from power lines is at least twice the height of tower, mast, and antenna combined. Tower should be installed and dismantled by experienced and trained personnel. All antenna installations must be grounded per local or national codes.

BASE: The size of the concrete base for a bracketed #45 tower, with a house bracket 12' aboveground, is 3' deep by 2' square. For cases of loose soil, etc., the base must be larger. Spread about 2" of gravel in bottom of hole prior to setting base assembly. The base assembly should be attached to the first 10' section prior to setting into gravel. After setting base assembly on gravel, fill another 3" with gravel around legs of base. This allows the tower base legs to extend the required amount below the base of the concrete, thus allowing for drainage of moisture into the gravel. The base assembly and first 10' section should be leveled, plumbed, and temporarily guyed or braced while pouring the concrete. This will insure a plumb tower after installation. Check tower to assure it is plumb and level after pouring concrete. Do not pull base up into the concrete to level it and do not drive it hard into ground as this plugs leg holes and prevents moisture drainage. Crown the top of the concrete slightly to prevent water accumulation. Do not use drive rods as a base for tower when set in concrete.

HEIGHT OF TOWER & BRACKET USES: House brackets must be used and should be mounted at least 12' above-ground to be effective. The #45 tower should not extend more than 45' (maximum) above a house bracket. (Note: Two house brackets are to be used, equally spaced, on the 80', 90', and 100' towers.) To secure the house bracket, use lag screws no smaller than 3/8" x 2". A special effort should be made to locate the house bracket such that the lag screws go through the siding into a stud. Brackets fastened to the siding only will not hold in a high wind. Tighten the house bracket U-bolts only enough to prevent looseness. Do not dent or flatten the tower upright members by excessively tightening U-bolts.

BOLTS: Installers are urged to use a 10" lining-up punch that tapers from about 1/2" to 5/32" diameter over a 6-1/2" length. If bolts cannot be pushed through the holes with the heel of a hand while rocking the tower, do not hammer them through. Carefully drive the punch into the hole just enough to slightly enlarge it. The leg bolt hole should be just large enough to admit the bolt. Never drill out the holes. Be sure to tighten all leg bolts until they partially flatten the sleeves, causing the sleeves to actually grip the legs inside. Always replace stripped bolts. Upon completing an installation, there should be no vertical movement between tower sections at the joints when the tower is deliberately swayed from side to side.

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<u>CAUTION</u> ... Be sure hinge bolts on hinged type accessories are loosened before attempting to hinge tower over. Hinge up no more than 45' of #45 tower only. All hinged type bases are recommended to be used to raise tower only without antenna. When raising and lowering tower on any hinged type base or hinge section, the loads applied for hinging the tower must be applied equally on both sides of the tower in order to reduce the possibility of twist on tower and hinges at the base. Special care must be taken to avoid the use of raising and lowering methods which may cause damage to tower or hinges. Hinged bases and roof mounted towers should only be installed and dismantled by professional and experienced installers.

All types of antenna installations should be thoroughly inspected by qualified personnel at least twice a year and remarked with hazard and warning labels to insure safety and proper performance.

Dismantling of any tower should be done by professional and experienced installers a section at a time with the use of an erection fixture.

All information is based upon average antennas, with no more than 2 square feet of area in a 20 psf (70 mph) wind load and a safety factor, with antenna installed at tower apex.

THESE ARE FACTORY TESTED INSTRUCTIONS. PLEASE FOLLOW CAREFULLY.

"WARNING: INSTALLING OR DISMANTLING THIS PRODUCT NEAR POWER LINES IS DANGEROUS. FOR YOUR SAFETY, FOLLOW THE SAFETY DIRECTIONS."

#### INSTALLATION AND DISMANTLING SAFETY INSTRUCTIONS -- YOU, YOUR ANTENNA, AND SAFETY

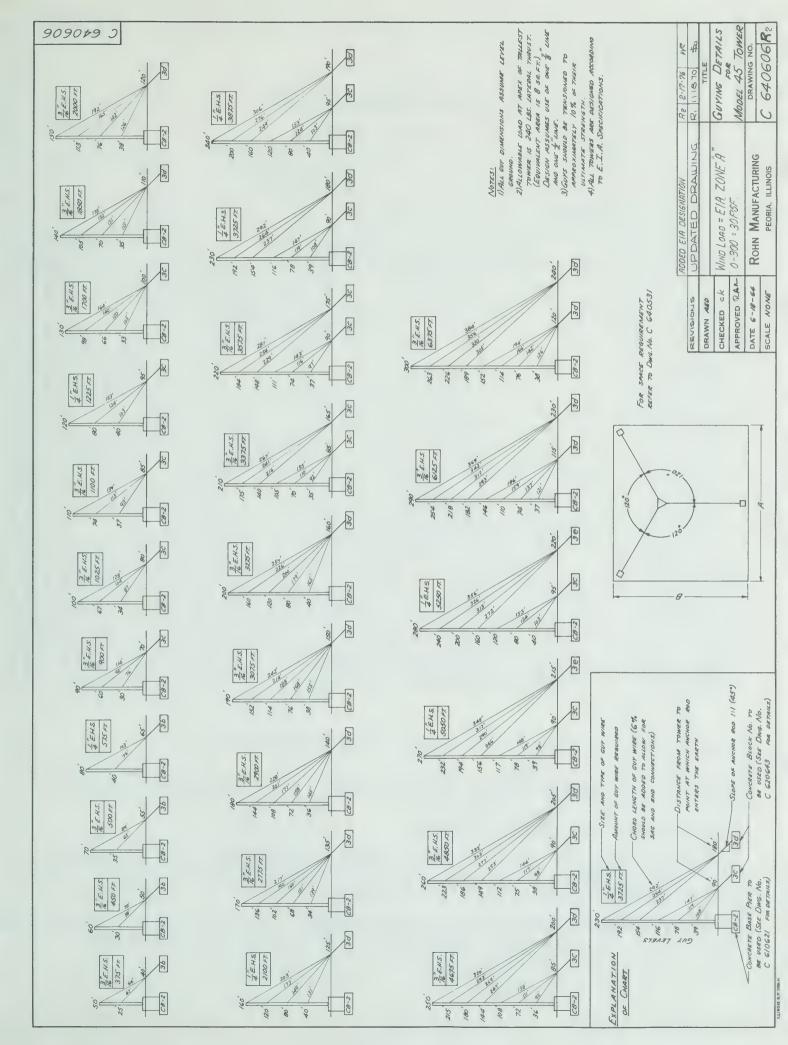
Each year hundreds of people are killed, mutilated, or receive severe permanent injuries when attempting to install or dismantle an antenna. In many of these cases, the victim was aware of the dangers of electrocution but did not take adequate steps to avoid the hazard.

For your safety and to help you achieve a SAFE installation, please READ and FOLLOW the safety precautions below. THEY MAY SAVE YOUR LIFE!

- 1. If you are installing or dismantling an antenna for the first time, please, for your own safety as well as others, seek PROFESSIONAL ASSISTANCE. Consult your dealer. He can explain which mounting or dismantling method to use for the size and type antenna you are about to install or dismantle.
- 2. Select your installation site with safety, as well as performance, in mind. (See information on Site Selection.) REMEMBER: POWER LINES AND PHONE LINES LOOK ALIKE. FOR YOUR SAFETY, ASSUME THAT ANY OVERHEAD LINES CAN KILL YOU.
- 3. Call your power company. Tell them your plans and ask them to look at your site. This is little inconvenience, considering YOUR LIFE IS AT STAKE.
- 4. Before you begin, plan your installation or dismantling procedure carefully. Successful installation or dismantling of a mast or tower is largely a matter of coordination. Each person should be assigned to a specific task and should know what to do and when to do it. One person should be designated as the "boss" to call out instructions and watch for signs of trouble.
- 5. When installing or dismantling your antenna, REMEMBER: DO NOT use a metal ladder. DO NOT work on a wet or windy day or if a thunderstorm is approaching. DO dress properly -- shoes with rubber soles and heels, rubber gloves, long sleeve shirt or jacket.
- 6. If the assembly starts to drop, get away from it and let it fall. REMEMBER: The antenna, mast, cable, and metal guy wires are all excellent conductors of electrical current. Even the <u>slightest touch</u> of any of these parts to a power line completes an electrical path through the antenna and the installer -- THAT'S YOU!
- 7. If any part of the antenna system should contact a power line -- DON'T TOUCH IT OR TRY TO REMOVE IT YOURSELF. CALL YOUR LOCAL POWER COMPANY. They will remove it safely.
- 8. If an electrical accident should occur -- DON'T grab hold of the person in contact with the power line or you too will be electrocuted. Use a DRY board, stick or rope to push or pull the victim away from the antenna. If the victim has stopped breathing, administer artificial respiration -- and stay with it. Have someone call for medical help.

SITE SELECTION: Before attempting to install your antenna, think where you can best place your antenna for safety and performance. To determine a safe distance from wires, power lines, and trees: 1) Measure the height of your antenna; 2) Add this length to the length of your tower or mast; and then, 3) Double this total for the minimum recommended safe distance.

If you are unable to maintain this safe distance, STOP! GET PROFESSIONAL HELP. Generally, the higher the antenna is aboveground, the better it performs. Good practice is to install your antenna above the roof line and away from power lines and obstructions. Remember that the FCC limits your CB antenna height. If possible, find a mounting place close to your set, where the antenna wire can take a short, vertical drop on the outside of the house for entry through a wall or window near the set. Your dealer carries a complete line of installation and grounding hardware.



Zone "A" Wind Load

8 Sq. Ft. of Allowable Load

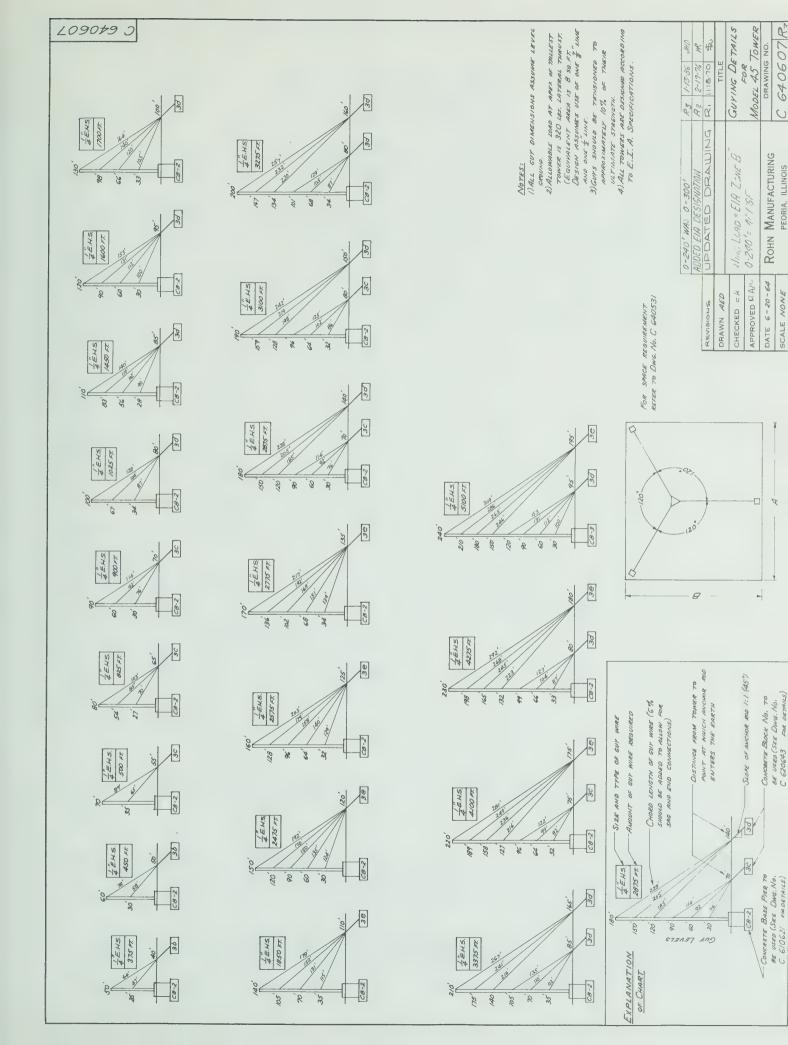
		0.1	BPC45G											
		AG2	with	APL45G	5G	G.W.	G.W.				T.B.	T.B.		
Tower		457	3/4"x12"	and	GA4	3/16"	1/4"	C.C.F.	C.C.F.	TH.	3/8"x6"	1/2"x12"	GAC	GAC
Height	45G	7.	PP	SA253UA	0	EHS	EHS	3/16"	1/4"	1/4"	E&E	E&E	253	255
50 <b>'</b>	4	1	1		2	375'		36		12	6		3	
60'	5	1	1		2	450'		36		12	6		3	
70'	6	1	1		2	500'		36		12	6		3	_
80'	7	1	1		2		600'		36	12		6	3	
90'	8	1	1		3	900'		54		18	9		3	
100'	9	1	1		3	1100'		54		18	9		3	
110'	10	1	1		3	1150'		54		18	9		3	<u>L</u> .
120'	11	1	1		3		1225'		54	18		9	3	<u> </u>
130'	12	1	1		4	1700'		72		24	12			3
140'	13	1	1		4	1850'		72		24	12			3
150'	14	1	1		4	2000'		72		24	12			3
160'	16		1	1	4		2150'		72	24		12		3
170'	17		1	1	5	2775		90		30	15			3
180'	18		1	1	5	2900'		90		30	15			3
190'	19		1	1	5	3175'		90		30	15			3
200'	20		1	1	5	3275 <b>'</b>		90		30	15			3
210'	21		1	1	6	3375'		108		36	18		6	
220'	22		1	1	6	3575'		108		36	18		6	
230'	23		1	1	6		3725'		108	36		18	6	
240'	24		1	1	6		3875'		108	36		18	6	
250'	25		1	1	7	4675'		126		42	21		3	3
260'	26		1	1	7	4850'		126		42	21		3	3
270'	27		1	1	7		5150'		126	42		21	3	3
280'	28		1	1	7		5250		126	42		21	3	3
290'	29		1	1	8	6150'		144		48	24			6
300'	30		1	1	8	6375'		144		48	24			6

Items shown above are necessary for complete "ground" guyed towers.

For "roof" towers a flat roof mount (FR45G) is substituted for the concrete base plate (BPC45G) and wall anchors (GAWP25) are substituted for the concrete anchors (GAC25).

When ordering specify "roof" or "ground".

Anchor grounding (AGKE) and base grounding (BGKE), as recommended by EIA, are included in tower material. However, extra copper wire may be required for roof installations. See appropriate sheet for grounding material and order extra copper wire as a separate item.



Zone "B" Wind Load

8 Sq. Ft. of Allowable Load

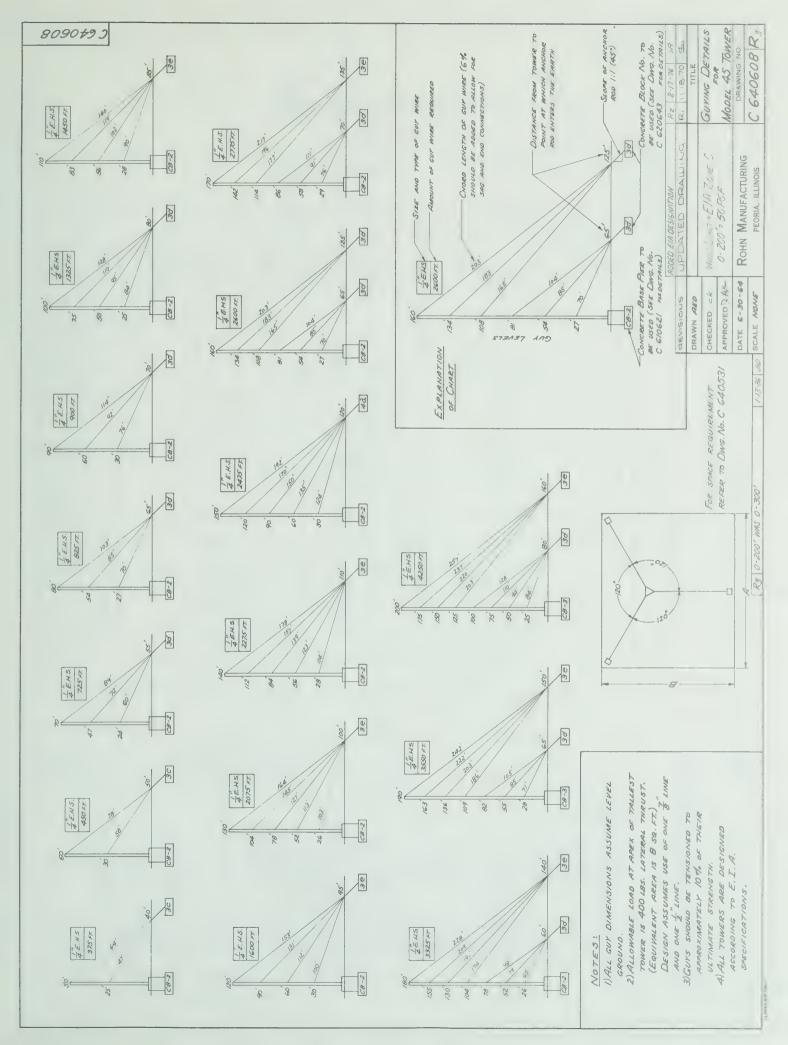
Tower Height	45G	45AG2	BPC45G with 3/4"x12" PP	APL45G and SA253UA	GA45G	G.W. 1/4" E.H.S.	C.C.F.	TH.	T.B. 1/2"x12" E&E	GAC 253	GAC 255
50 <b>'</b>	4	1	1		2	375'	36	12	6	3	
60'	5	1	1		2	5001	36	12	6	3	
70 '	6	1	1		2	500'	36	12	6	3	
80'	7	1	1		3	825'	54	18	9	3	
90'	8	1	1		3	900'	54	18	9	3	
100'	9	1	1		3	1100'	54	18	9	3	
110'	10	1	1		4	1500'	72	24	12		3
120'	11	1	1		4	1600'	72	24	12		3
130'	12	1	1		4	1700'	72	24	12		3
140'	13	1	1		4	1850'	72	24	12		3
150'	14	1	1		5	25001	90	30	15		3
160'	16		1	1	5	2650'	90	30	15		3
170'	17		1	1	5	2775	90	30	15		3
180'	18		1	1	6	2875'	108	36	18	6	
190'	19		1	1	6	3100'	108	36	18	6	
200'	20		1	1	6	32751	108	36	18	6	
210'	21		1	1	6	3375'	108	36	18	6	
220	22		1	1	7	4100'	126	42	21	3	3
230'	23		1	1	7	4275	126	42	21	3	3
240 '	24		1	1	8	5150'	144	48	24		6

Items shown above are necessary for complete "ground" guyed towers.

For "roof" towers a flat roof mount (FR45G) is substituted for the concrete base plate (BPC45G) and wall anchors (GAWP25) are substituted for the concrete anchors (GAC25).

When ordering specify "roof" or "ground".

Anchor grounding (AGKE) and base grounding (BGKE), as recommended by EIA, are included in tower material. However, extra copper wire may be required for roof installations. See appropriate sheet for grounding material and order extra copper wire as a separate item.



Zone "C" Wind Load

8 Sq. Ft. of Allowable Load

			BPC45G								
Tower			with 3/4"x12"	APL45G and		G.W. 1/4"	C.C.F.	TH.	T.B. 1/2"x12"	GAC	GAC
Height	45G	45AG2	PP	SA253UA	GA45G	E.H.S.	1/4"	1/4"	E&E	253	255
50'	4	1	1		2	375	36	12	6	3	
60'	5	1	1		2	500'	36	12	6	3	
70 <b>'</b>	6	1	1		3	725	54	18	9	3	
80'	7	1	1		3	825'	54	18	9	3	
90'	8	1	11		3	900'	54	18	9	3	
100'	9	1	1		4	1325'	72	24	12		3
110'	10	1	1		4	1500'	72	24	12		3
120'	11	11	1		4	1600'	72	24	12		3
130'	12	1	1		5	2150'	90	30	15		3
140'	13	1	1		5	2275'	90	30	15		3
150'	14	1	1		5	2500'	90	30	* N	OTE -	_ * _
160'	16		1	1	6	2600'	108	36	18	6	
170'	17		1	1	6	27751	108	36	18	6	
180'	18		1	1	7	3325'	126	42	21	3	3
190'	19		1	1	7	3600'	126	42	21	3	3
200'	20		1	1	8	4250'	144	48	24		6

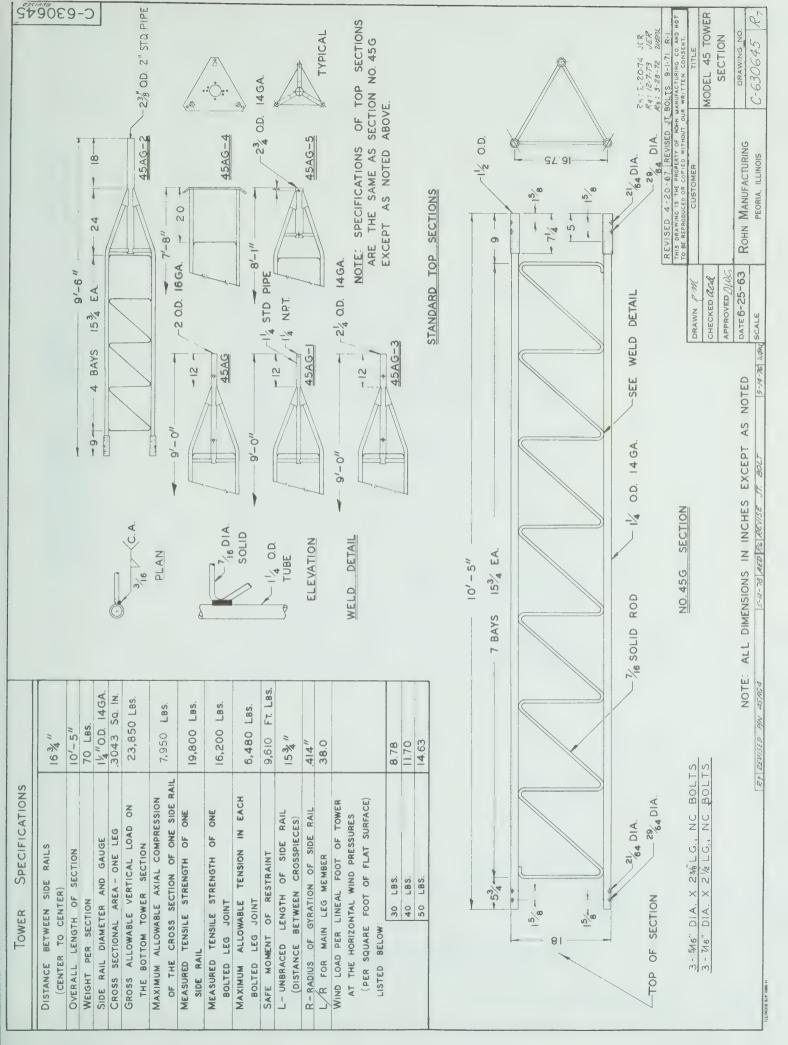
<sup>\*</sup> NOTE: For 150' ground tower, use 3 GAC3455 anchors and 15 1/2"x12" galvanized turnbuckles (E&J) rather than those shown in the chart above.

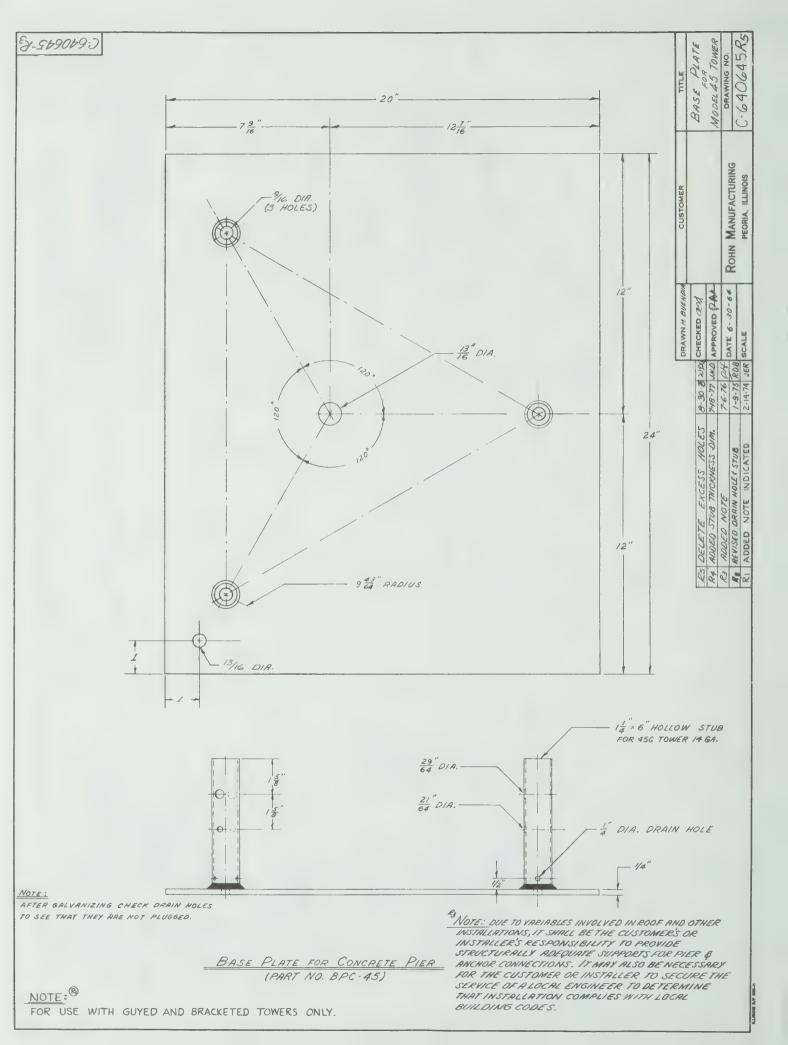
Items shown above are necessary for complete "ground" guyed towers.

For "roof" towers a flat roof mount (FR45G) is substituted for the concrete base plate (BPC45G) and wall anchors (GAWP25) are substituted for the concrete anchors (GAC25).

When ordering specify "roof" or "ground".

Anchor grounding (AGKE) and base grounding (BGKE), as recommended by EIA, are included in tower material. However, extra copper wire may be required for roof installations. See appropriate sheet for grounding material and order extra copper wire as a separate item.





Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

### All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

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### **ROHN** No. 55

# COMMUNICATION TOWER

#### **GENERAL USE**

This tower lends itself to a wide variety of uses commonly encountered in the communications field. Adaptability to varying heights and loading requirements are two of the strong points for this model.

#### **DESIGN**

This tower was engineered to provide excellent strength in heights up to 400 ft. in a 30 lb. per sq. ft. windload. When properly installed and guyed, the standard tower will support 24 sq. ft. in the top 50' (maximum of 4 antennas). Because of this rugged design the No. 55 tower satisfies a broad range of communication uses, particularly where unusual windloading and height requirements exist.

#### CONSTRUCTION

Constructed on a 18-1/2" equilateral triangle pattern, utilizing 1-1/2" high-strength tubing for the side rails. The "zig-zag" cross bracing is formed from a continuous 7/16" solid steel rod electrically welded every 15-3/4" on the side rails. Each 10' section is sleeve joined to the other and double bolted to provide superior strength.

#### **FINISH**

The tower sections as well as all accessories are completely Hot Dip Galvanized, both inside and out, *after fabrication* to protect all points of welding and construction against corrosion and to provide an attractive and maintenance free installation.

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

All towers and masts should be installed and dismantled by experienced and trained personnel.

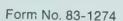
All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

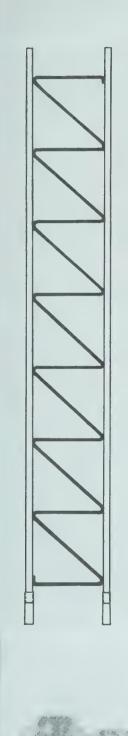
All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

ROHN.

6718 West Plank Road P.O. Box 2000 • Peoria, Illinois 61656 Phone: 309-697-4400 TWX 910-652-0646 U.S.A.





#### #55 TOWER

PART NUMBER		WT.
55G	10' tower section	100
55TG	10' tapered base section (sits on a pier pin - order pier pin separately)	138
55ACL	10' welded anti-climb section	185
455ACL3	3 anti-climb metal sheets for attaching to tower section	120
5545G	20' adapter section for joining 45G and 55G sections	160
55JBK	Joint bolt kit	1
APL55G	Beacon plate	18
SB55G	5' short base section for concrete	45
BPC55G (*)	Concrete base plate (sits on a pier pin - order pier pin separately)	40
3/4x12PP	Pier pin (for BPC55G or 55TG - one required)	1
GA55G	Guy assembly (bracket with torque bars)	28
GB55G	Guy bracket only	19
BPL55G	Top plate with guy lugs for mounting AB, TB3 or TB4 bearing	18
AB	Amateur bearing for use with appropriate top (2" x 4" x 10" hardware)	1
TB3	Heavy duty thrust bearing, recommended for 2" O.D. tubing	2-1/2
TB4	Heavy duty thrust bearing, recommended for 3" O.D. tubing	3
SA253UA	Side arm assembly, 2-1/2' to 3' extension, with 2-1/4" O.D. support tube	28
*TA55	Torque arm stabilizer assembly	60
/*55TDM2/	Top dish mount w/2" O.D. mast (extends 3' above top plate)	60
/*55TDM2SP/	Top dish mount w/2" standard pipe (extends 5' above top plate)	80
/*55TDM2EH/	Top dish mount w/2" EH pipe (extends 5' above top plate)	90
/*55TDM25SP/	Top dish mount w/2-1/2" standard pipe (extends 5" above top plate)	95
/*55TDM25EH/	Top dish mount $w/2-1/2$ " EH pipe (extends 5' above top plate)	110
*DM55G2	Side face dish mount w/2" (2-3/8" O.D.) 5' long standard pipe	53
*DM554	Side face dish mount $w/4$ " $(4-1/2$ " O.D.) 5' long standard pipe	89
EF5565	16' aluminum erection fixture for #55 or 10' #65 sections	70
EF6520	16' heavy duty aluminum erection fixture for #55 or 20' #65 sections	90
EF6520RH	Erection fixture (same as above) with rotating head	100
AS455G	Accessory shelf	8
SR55	Safety ring	10
WP55G	Work platform	15

Note: Erection fixtures should be used to raise one 10' or 20' section at a time.

#### / Available by special order only. Allow 60 days for delivery. /

\*This item is not to be used without proper design consideration.

(\*)Towers mounted on this base must be bracketed or guyed at all times.

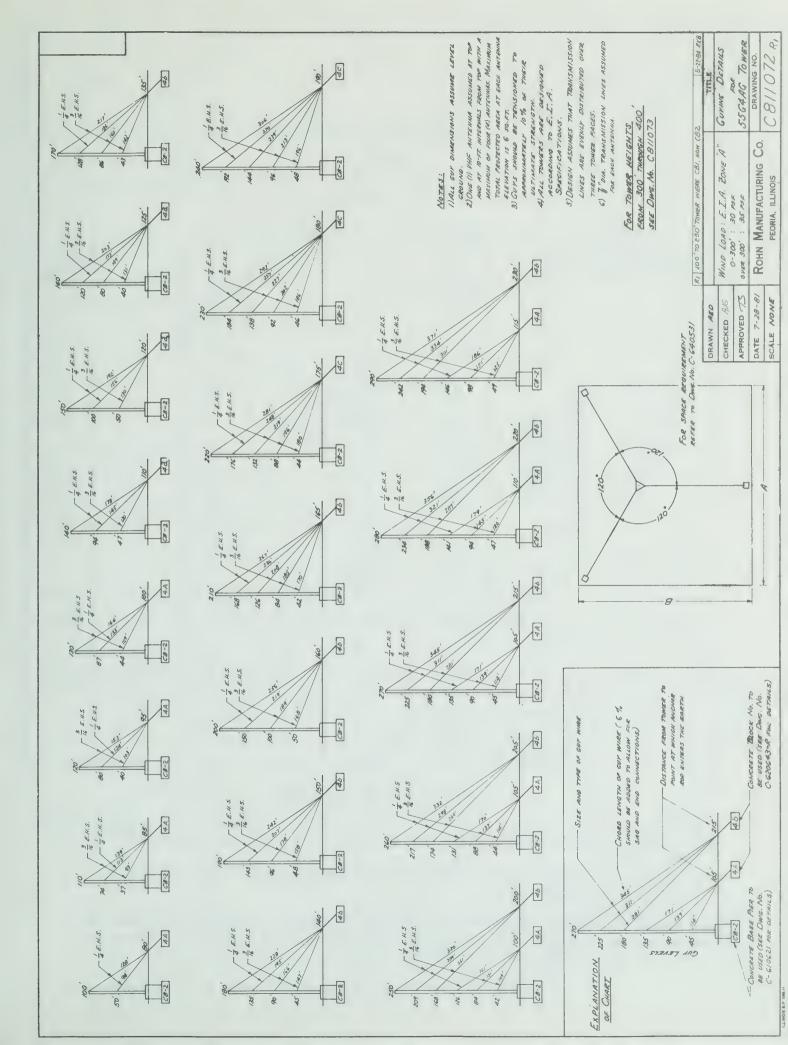
The price on #55 sections will be higher on shipments to the following states: Arizona, California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming.

Refer to alphabetical/numerical price list for current prices.

Also, see alphabetical/numerical price list for Reference Sheet Prices on Complete Ground Guyed #55G Towers.

F.O.B. PEORIA, ILLINOIS.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



#### Zone "A" Wind Load

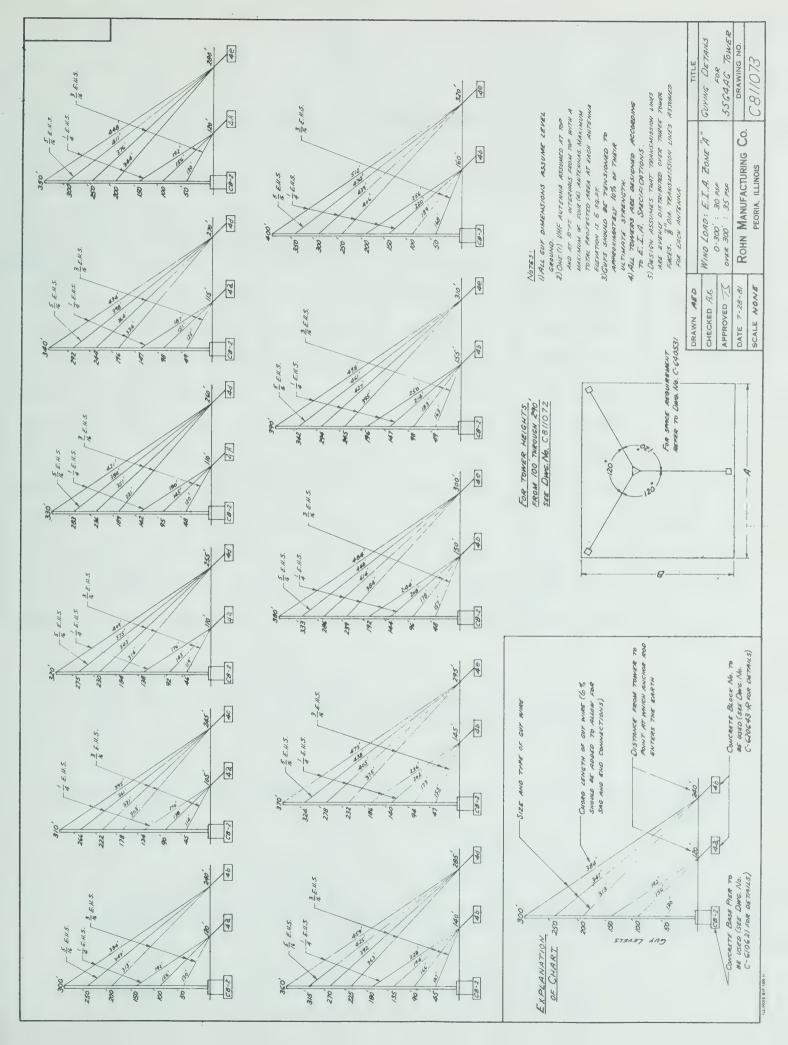
24 Sq. Ft. of Allowable Antenna Load in the Top 30'

Tower Height	GA55G	G.W. 3/16" E.H.S.	G.W. 1/4" E.H.S.	C.C.F. 3/16"	C.C.F. 1/4"	TH. 3/8"	T.B. 1/2"x12" E&J	GAC 3455
100'	2		750'		43	13	6	3
110'	3	800'	400'	43	19	19	9	3
120'	3	1000'	500 <b>'</b>	43	19	19	9	3
130'	3	1000'	500'	43	19	19	9	3
140'	3	500'	1050'	25	37	19	9	3
150'	3	500'	1100'	25	37	19	9	3
160'	4	1650'	500'	61	19	25	12	3
170'	Ą	1700'	600 <b>'</b>	61	19	25	12	3
180'	4	1000'	1350'	43	37	25	12	3
190'	4	1150	1450'	43	37	25	12	3
200'	4	1200'	1500 <b>'</b>	43	37	25	12	3
210'	5	2000'	1600'	61	37	31	15	3
220'	5	2000'	1700'	61	37	31	15	3
230'	5	2000'	1750'	61	37	31	15	3
240'	5	2100'	2000'	61	37	31	15	3
250 <b>'</b>	6	1650'	2500'	67	55	37	18	6
260'	6	1700'	2600'	67	55	37	18	6
270'	6	1800'	2700'	67	55	37	18	6
280'	6	2000'	2800'	67	55	37	18	6
290'	6	2000'	3000 <b>'</b>	67	55	37	18	6

(continued on next page)

Items shown above, plus ACWS, APL55G, SA253UA, BPC55G, 3/4X12PP, and required number of 55G 10' sections, are necessary for a complete "ground" guyed tower.

Anchor grounding (AGKE) and base grounding (BGKE), as recommended by EIA, are included in tower material.



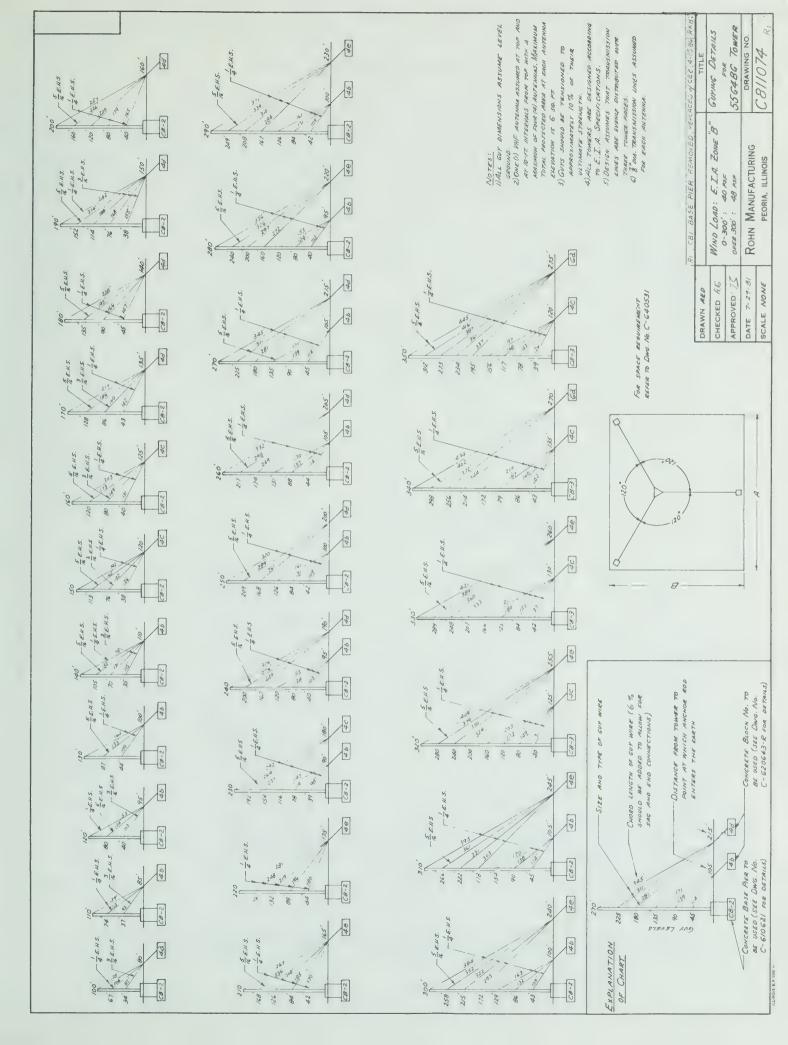
Zone "A" Wind Load

24 Sq. Ft. of Allowable Antenna Load in the Top 30'

Tower Height	GA55G	G.W. 3/16" E.H.S.	G.W. 1/4" E.H.S.	G.W. 5/16" E.H.S.	C.C.F. 3/16"	C.C.F.	C.C.F. 5/16"	TH.	T.B. 1/2"x12" E&J	T.B. 5/8"x12" E&J	GAC 3455
300'	6	2000'	2000'	1125'	67	37	19	37	15	3	6
310 <b>'</b>	7	3000'	3000'		85	55		43	21		6
320	7	3000'	2000'	1200'	85	37	19	43	18	3	6
330'	7	3000'	2000'	1250'	85	37	19	43	18	3	6
340'	7	2100'	3200 <b>'</b>	1300'	67	55	19	43	18	3	6
350 <b>'</b>	7	2200'	3250¹	1325'	67	55	19	43	18	3	6
360 <b>'</b>	8	4200'	2200'	1400'	103	37	19	49	21	3	6
370'	8	2300'	4200'	1400'	67	73	19	49	21	3	6
380'	8	1200'	5500 <b>'</b>	1450'	49	91	19	49	21	3	6
390 <b>'</b>	8	1200'	5700'	1500'	49	91	19	49	21	3	6
400'	8	1200'	6000'	1500'	49	91	19	49	21	3	6

Items shown above, plus ACWS, APL55G, SA253UA, BPC55G, 3/4X12PP, and required number of 55G 10' sections, are necessary for a complete "ground" guyed tower.

Anchor grounding (AGKE) and base grounding (BGKE), as recommended by EIA, are included in tower material.



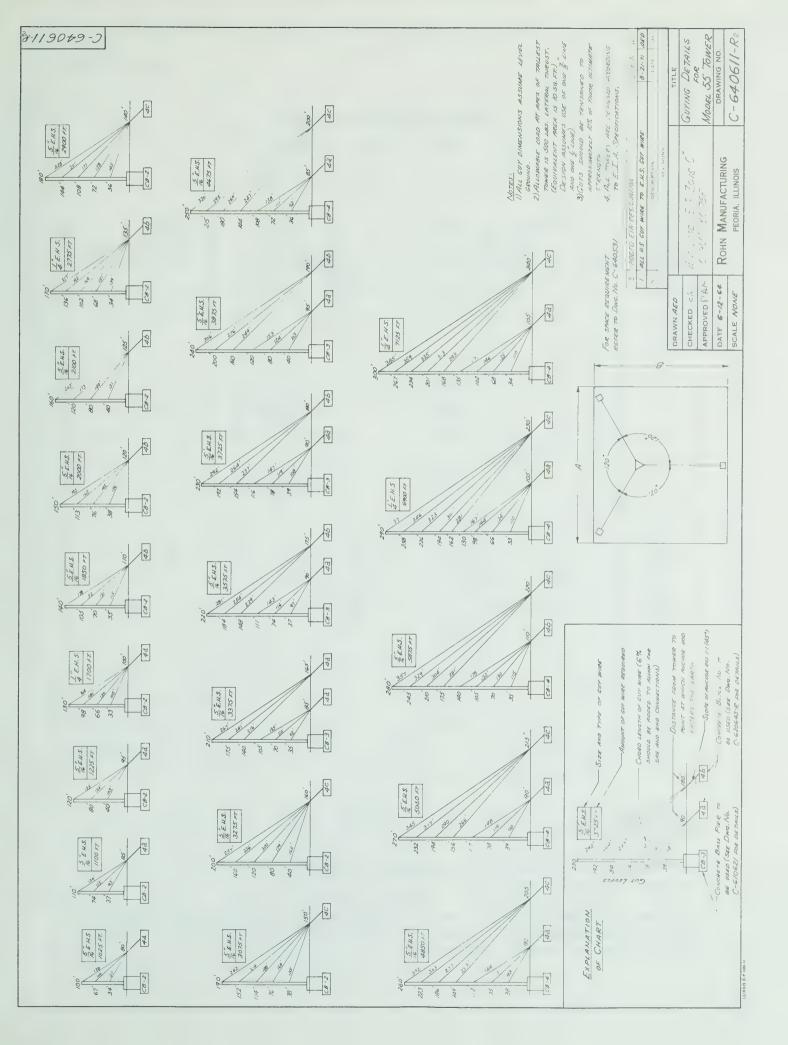
Zone "B" Wind Load

24 Sq. Ft. of Allowable Antenna Load in the Top 30'

Tower Height	GA55G	G.W. 3/16" E.H.S.	G.W. 1/4" E.H.S.	G.W. 5/16" E.H.S.	C.C.F.	C.C.F. 1/4"	C.C.F.	TH.	T.B. 1/2"x12" E&J	T.B. 5/8"x12" E&J	GAC 3455	GAC 5655
100'	3	350'	750'		25	37		19	9		3	
110'	3	350'	800'		25	37		19	9		3	
120'	3	400'	500'	400'	25	19	19	19	6	3	3	
130'	3		1000'	425		43	19	19	6	3	3	
140'	4	1000'	600'	500'	43	19	19	25	9	3	3	
150'	4	500	1150'	550'	25	37	19	25	9	3	3	
160'	4	500'	1150'	550'	25	37	19	25	9	3	3	
170'	4	600'	1200'	600 <b>'</b>	25	37	19	25	9	3	3	
180'	4		2000'	625'		61	19	25	9	3	3	
190'	5	1700'	800'	7001	61	19	19	31	12	3	3	
200'	5		2600'	725		79	19	31	12	3	3	
210'	5		2800 <b>'</b>	750 <b>'</b>		79	19	31	12	3	3	
220'	5		3600'			97		31	15		3_	
230'	6		3000 <b>'</b>	850 <b>'</b>		103	19	37	15	3	6	
240'	6		3000'	900'		103	19	37	15	3	6	
250'	6		3200 <b>'</b>	925		103	19	37	15	3	6	
260'	6		3500 <b>'</b>	950'		103	19	37	15	3	6	
270 <b>'</b>	6		3000'	1550'		85	37	37	12	6	6	
280'	7		4200'	1050'		121	19	43	18	3	6	
290 <b>'</b>	7		4500 <b>'</b>	1100'		121	19	43	18	3	6	
300'	7		4650'	1125'		121	19	43	18	3	6	
310'	7		4700'	1150'		121	19	43	18	3	6	
320'	8		4500'	2550'		121	37	49	18	6	6	
330'	8		45001	2600'		121	37	49	18	6	6	
340'	8		4600'	2700'		121	37	49	12	12	3	3
350'	9		5600'	2750'		139	37	55	12	15	3	3

Items shown above, plus ACWS, APL55G, SA253UA, BPC55G, 3/4X12PP, and required number of 55G 10' sections, are necessary for a complete "ground" guyed tower.

Anchor grounding (AGKE) and base grounding (BGKE), as recommended by EIA, are included in tower material.



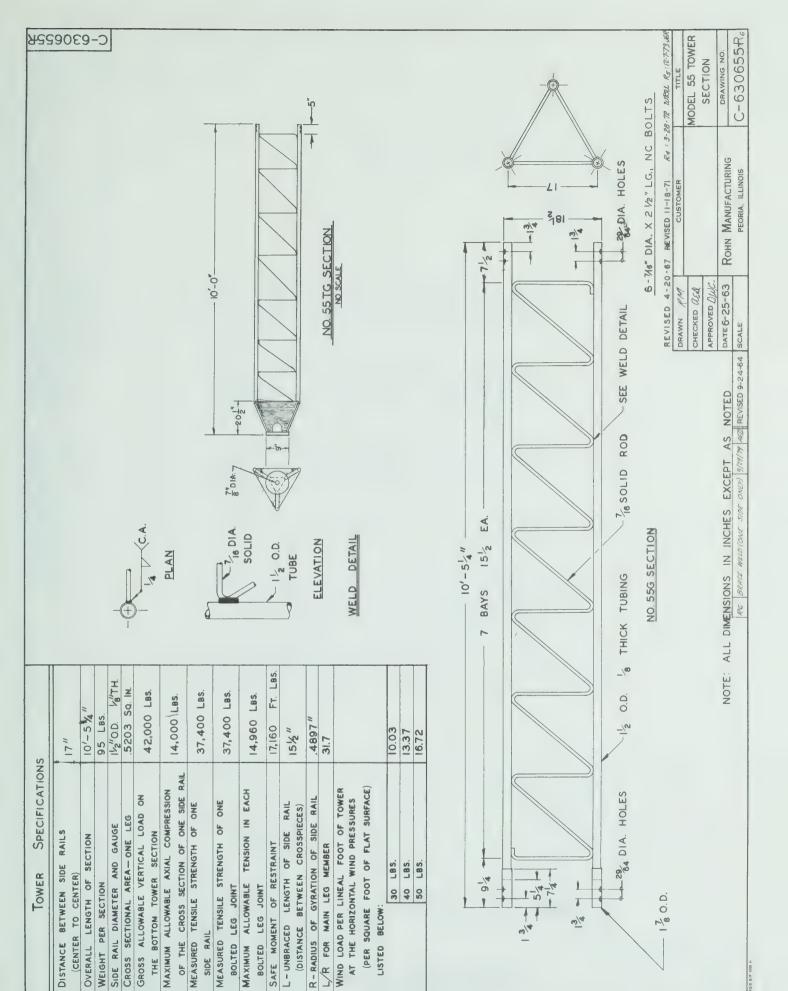
Zone "C" Wind Load

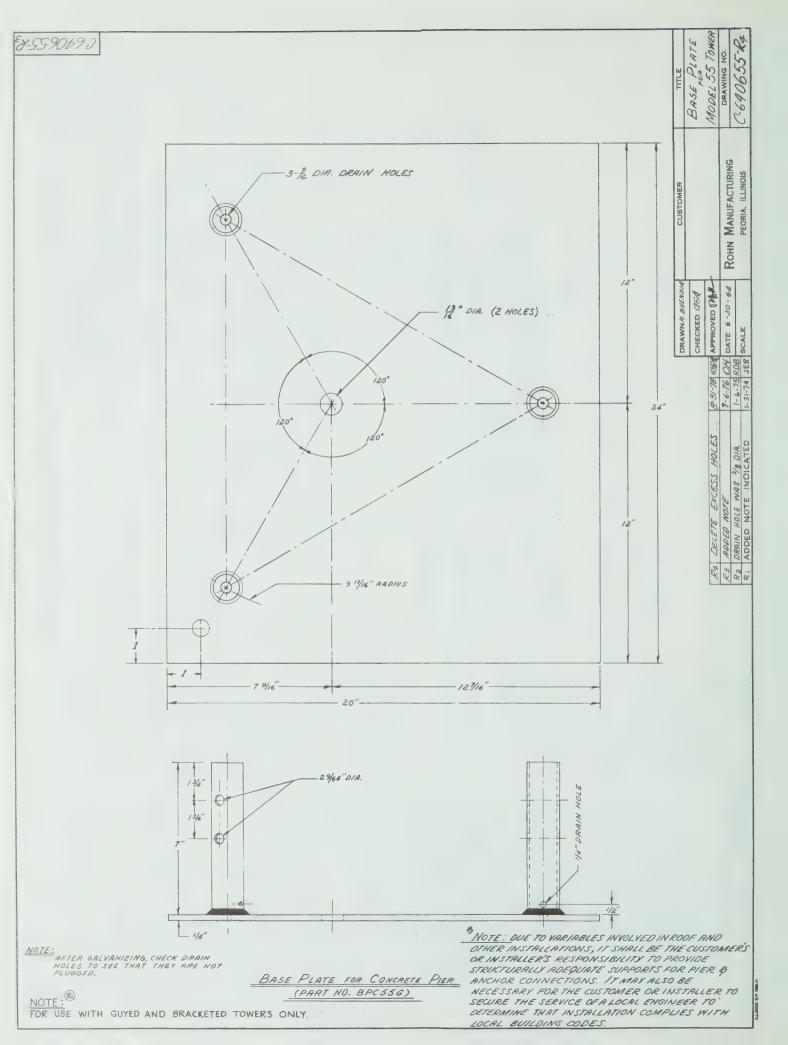
10 Sq. Ft. of Allowable Load

Tower Height	GA55G	G.W. 1/4" E.H.S.	G.W. 5/16" E.H.S.	C.C.F.	C.C.F. 5/16"	TH.	T.B. 1/2"x12" E&J	GAC 3455
100'	3		1100'		54	18	9	3
110'	3		1100'		54	18	9	3
120'	3		1225'		54	18	9	3
130'	4	1700'		72		24	12	3
140'	4		1850'		72	24	12	3
150'	4		2000'		72	24	12	3
160'	4		2150'		72	24	12	3
170'	5	2775'		90		30	15	3
180'	5		2900'		90	30	15	3
190'	5		3175'		90	30	15	3
200'	5		3275'		90	30	15	3
210'	6		3375'		108	36	18	6
220'	6		3600 <b>'</b>		108	36	18	6
230'	6		37251		108	36	18	6
240'	6		3875'		108	36	18	6
250'	7		4675'		126	42	21	6
260'	7		4850'		126	42	21	6
270'	7		5100'		126	42	21	6
280'	8		5875'		144	48	24	6
290'	9	6900'		162		54	27	6
300'	9	7125'		162		54	27	6

Items shown above, plus ACWS, APL55G, SA253UA, BPC55G, 3/4X12PP, and required number of 55G 10' sections, are necessary for a complete "ground" guyed tower.

Anchor grounding (AGKE) and base grounding (BGKE), as recommended by EIA, are included in tower material.





ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

## All antenna installations must be grounded per local and national codes.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

## All antenna installations must be grounded per local and national codes.

# No.65 COMMUNICATION TOWER

...LENDS ITSELF TO A WIDE VARIETY OF USES
MEETING A WIDE RANGE OF
COMMUNICATION NEEDS!

#### **DESIGN**

This tower can provide excellent rigidity and strength in heights up to 450 feet when properly guyed. Because of its rugged strength, the No. 65 Tower covers a broad range of communication uses, particularly where extraordinary windloading and height requirements must be met.

#### CONSTRUCTION

Constructed on 26-1/4" equilateral triangle pattern, utilizing 2" x 1/8" high-strength steel tube side rails. Sections 10' or 20' in length. Cross bracing is formed by a continuous 5/8" solid rod fashioned into a "zig-zag" shape, joining side rails every 22", electrically welded throughout.

#### **FINISH**

All tower sections are completely hot-dip galvanized after fabrication to protect all points of welding and construction against corrosion... and to provide an attractive installation. The quality of ROHN towers is always assured by a complete Quality Control program that begins with the examination of the raw material to assure that exact specifications are met and follows on through the finished product. You know its the best when its a Rohn Tower!

#### INSTALLATION

Fast up installation is another big reason for the selection of the No. 65 tower. Completely prefabricated 10' or 20' sections go up fast.

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

All towers and masts should be installed and dismantled by experienced and trained personnel.

sonnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure salety and proper performance.

All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and volds all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same qualify and have not been tested or engineered by ROHN to conform to the same qualify standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

## ROHN.

6718 West Plank Road P.O. Box 2000 • Peoria, Illinois 61656 Phone: 309-697-4400 TWX 910-652-0646

#### #65 TOWER

PART NUMBER		WT.
65G 6520G *65GL *6520GL 65TG 15/16X16PP SB65G 5/8X12BB DP65A	10' tower section 20' tower section 10' tower section w/lugs for torque arms 20' tower section w/lugs for torque arms 10' tapered base Pier pin (for 65TG - one required) 5' short base section for concrete Concrete base bolt w/double nuts Drainage plates (set of 3) (use when bolting section directly onto concrete)	173 330 178 335 150 3 75 1
65JBK CP4A APL4HA	Joint bolt kit Cap plates (set of 3 w/nuts and bolts) Beacon plate (leg mounted) and two cap plates w/nuts and bolts	4-1/2 15 15
GA65G SA253UA	Guy assembly Side arm assembly, 2-1/2' to 3' extension, with 2-1/4" support tube	18 28
*TA656 (*) *TA658 (*) DM654 (*)	Channel torque arm, 6" Channel torque arm, 8" Face dish mount w/4" (4-1/2" 0.D.) 5' long standard pipe	185 225 98
DM654TB (*)	Face dish mount w/4" (4-1/2" 0.D.) 5' long	116
EF5565	standard pipe and tie back angle 16' aluminum erection fixture for #55 and 10' #65 sections	70
EF6520	16' aluminum erection fixture for #55 and 20' #65 sections	90
EF6520RH	Erection fixture (same as above) with rotating head	100
WPCC65	Work platform	35

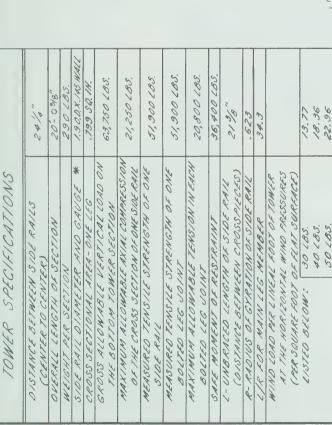
Note: Erection fixtures should be used to raise one 10' or 20' section at a time.

F.O.B. PEORIA, ILLINOIS.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

<sup>\*</sup>See appropriate engineering drawing for elevations.

<sup>(\*)</sup> This item is not to be used without proper design consideration.



# GENERAL NOTES

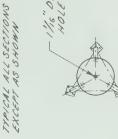
- 1. ALL SECTIONS ARE HOT OIP GALVANIZED AFTER FASRICATION.
  - 2. ALL SECTIONS CAN BE INSTALLED WITH EITHER
    - 540 UP, EXCEPT NO. 65TG. 3. 2"0.0. x 1/3" WALL TUBING ALTERNATE.
- 4.12-518" X2" BOLTS REQUIRED PER SECTION EXCEPT NO. 6576
- FOR FABRICATION DETAIL SECTION NO. 6520G SEE OWG. S. FOR FABRICATION DETAIL SECTIONS NO. 656 & 6576 SEE COWG. FOR SHOP USE ONLY) COWG. FOR SHOP USE ONLY). OWG. NO. 8770822 10.0771023



TOP & BOTTOM EACH LEG (ALL SECTIONS EXCEPT NO. 65TG WHERE THEY ARE 7/16" DIA. HOLE JUST ABOVE WELD, REQUIRED AT BOTTOM ONLY).



NOTE: THIS VIEW



10-01 2.5.0

10,5

V10391

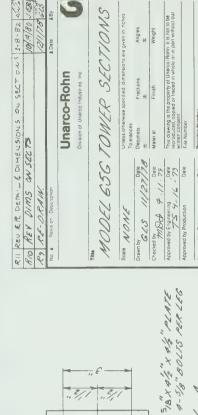
1,21

# NO. 65TG SECTION



# TOWER SECTIONS

2"0,0, X/3" WALL TUBING (TIP.)



MODEL 65G TOWER SECTIONS	Unless otherwise specified, dimensions are given in nones. To erances	Angles #	Weight	This drawing is the property of Unerco-Rohn It is not to be resproduced, copied or traced in whole or in part without our written consent.		C630665A11
75 SE	re specified, dimensio	Fractions	Finish	This drawing is the property of Unarco-Rohn It is not to be reproduced, copied or traced in whole or in part without ou written consent.		
TOWL	Unless otherwis To erances	Decimels +	Mater al	This drawing is reproduced, co written consent	File Number	Drawing Number
656	,	625 11/27/78	P.//. 79	- 16 - 79	Date	H-17-79
THIS MODEL	Scale NONE	Drawn by 62.5	Checked by BA 4.11.79	Approved by Engineering , Date	Approved by Production	Approved by Sales



ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

## All antenna installations must be grounded per local and national codes.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

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## All antenna installations must be grounded per local and national codes.

## ROHN. No. 80



#### 440' No. 80 Tower

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unuauthorized persons from climbing towers.

All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and re-marked with hazard and warning labels at least twice a year to insure safety and proper performance.

All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality sandards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

### COMMUNICATION TOWER

This tower is designed specifically for microwave installations, heavy duty communication, TV & FM broadcast and meteorological equipment installations.

#### CONSTRUCTION

The No. 80 Rohn Tower is constructed in an equilateral triangular pattern with either steel pipe or solid steel legs and tubular or angle steel cross-bracing with bolted construction. The triangular size is 41" on leg centers and the diameter of the tower legs vary to meet the requirements of the installation. This feature permits considerable flexibility in supplying a tower tailored to specifically meet and adequately handle the equipment to be installed.

#### FINISH

All components of this tower are completely Hot Dip Galvanized after fabrication to protect all areas of the tower. A minimum of 2 ounces of zinc per square foot of surface is applied throughout.

#### RATING

This tower is rated for installation up to 1000 feet using variable size and weight of tubular or solid steel components. Each tower is individually engineered to handle a particular job.

ROHN.

P.O. Box 2000 Peoria, IL 61656 TWX: 910-652-0646 FAX: 309-697-5612

Telephone: 309-697-4400

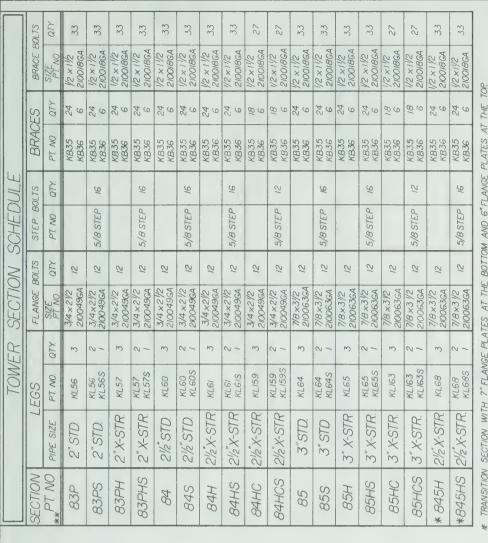
#### #80 TOWER

	#OU TUMER			
PART NUMBER			WT.	
83P 83PH 84 84H 845H / 85 /	20' standard tower section		435 520 565 685 715 730 900	
83PX 83PHX 84X 84XTA 84HXTA / 84HXTA / / 84HXTA3 / / 845HX / / 85HX /	20' x-braced tower section (for use with TA80H) 3' extension for 84HXTA tower section 20' 84HX transition section with 85 feet 20' x-braced tower section 20' x-braced tower section		550 640 680 1110 800 1230 225 830 845 1015	PRICES AVAILABLE UPON REQUEST
84HC 84HXC	15' standard tower section 15' x-braced tower section		545 620	PON RE
/ 83ACL / / 84ACL /	Anti-climb panels Anti-climb panels		595 600	QUEST.
80TB * * * * * * * * * * * * * * * * * * *	5' welded tapered base section 5' welded tapered base section 5' knocked down tapered base section 5' welded tapered base section (drilled to fit base insulator) 5' welded tapered base section (drilled to fit base insulator) 5' knocked down tapered base section (drilled to fit base insulator)		390 455 400 350 450 525	·
3/4x16BB 15/16x16PP	Concrete base bolt with double nuts (12 required) Pier pin for tapered bases (one required)		1-1/2	
DP80A / DP85A /	Drainage plates (set of 3) Drainage plates (set of 3)		20 44	
GA80 GA85	Guy assembly (bracket with torque bars) Guy assembly (bracket with torque bars)		115 140	
TA838 **     TA8310 **     TA8312 / **     TA648 **     TA8410 **     TA8410 / **     TA858 / **     TA8510 / **     TA8512 / **     TA80H **     TA86H / **	8" channel type torque arm (7-1/2') 10" channel type torque arm (7-1/2') 12" channel type torque arm (7-1/2') 8" channel type torque arm (7-1/2') 10" channel type torque arm (7-1/2') 12" channel type torque arm (7-1/2') 8" channel type torque arm (7-1/2') 10" channel type torque arm (7-1/2') 12" channel type torque arm (7-1/2') Heavy duty microwave torque arm (15') Heavy duty microwave torque arm (15')		335 420 580 340 425 585 345 430 595 740	
DM80F ** DM80FTBC ** DM80FTBT **	Dish mount, face mounted, with 4" (4-1/2" O.D.) 5' long pipe Dish mount (same as above) with tie back clips Dish mount (same as above) with tie back tube		200 205 265	
APL83M APL84M APL85M APL6A APL7A	Beacon plate for inside or outside tower (for sections 83P and 83PH) Beacon plate for inside or outside tower (for sections 84 and 84H) Beacon plate for inside or outside tower (for sections 85 and 85H) Beacon plate (leg mounted) and two cap plates with nuts and bolts (for sections 83P, 83PH, 84 and 84H) Beacon plate (leg mounted) and two cap plates with nuts and bolts		50 50 50 20	PRICES AVAILABLE
CP6A .	(for sections 85 and 85H) Cap plates (set of 3 W/nuts and bolts) for sections 83P, 83PH, 84 and 84H Cap plates (set of 3 W/nuts and bolts) for sections 85 and 85H	1	7 11	
	Ladder, standard, leg mounted - 10' or 20' sections Ladder, heavy, leg mounted - 10' or 20' sections Ladder, standard, face mounted - 10' or 20' sections Ladder, heavy, face mounted - 10' or 20' sections Ladder, standard, inside corner mounted - 20' sections Ladder, heavy, inside corner mounted - 20' sections		4/ft. 8/ft. 4/ft. 8/ft. 4/ft. 8/ft.	UPON REQUEST.
\$80	Step bolts, one leg		l/ft.	
/ SOL80H /	Ladder step-off assembly for bypassing heavy duty torque arm, consisting of two platforms and 30' face mounted standard ladder		213	
/ SOH80H /	Ladder step-off assembly for bypassing heavy duty torque arm, consisting of two platforms and 30' face mounted heavy ladder		331	
SM80 SM85	Shims (set of 15) Shims (set of 15)			
For heavy 1/8° braces For heavy 1/8° braces		add add	90# wt. 180# wt.	

#### / Not a stock item. Allow sufficient time for fabricating. /

<sup>\*</sup>Towers mounted on this base must be guyed at all times.

<sup>\*\*</sup>This item is not to be used without proper design consideration.



TY NO KB36
(T.S. 1½°0.0. x 16 GA.)
TYP TOP AND BOTTOM
OF ALL SECTIONS

TOWER AXIS

PLAN VIEW

2-10"-

73/8"

1/2 × 11/2 BOLT ASSEMBLY (TYP) \* TRANSITION SECTION WITH 7" FLANGE PLATES AT THE BOTTOM AND 6" FLANGE PLATES AT THE 7" FLANGE PLATES MUST BE BETWEEN NO. 95 SECTIONS AND ALL OTHER SECTIONS. \* SECTION PART NUMBERS ENDING WITH AN "S" INDICATE THAT THE SECTIONS WILL HAVE STEP ON ONE LEG FOR CLIMBING.

(T.S. 1/2"O.D. × 16 GA.)

ALL C SECTIONS, EXAMPLE 84HC = 15-2 3/16

ALL STANDARD SECTIONS, EXAMPLE 83P = 20'-0"

PT. NO KB35

108

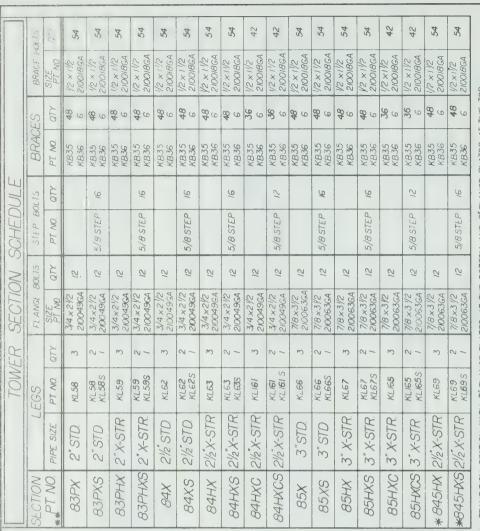
## SENERAL NOTES:

4-9 13/16" (TYP)

| No | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | Description | | No | A | Reversor | | No | A | Rever

1 PAL NUTS ARE PROVIDED FOR ALL TOWER BOLTS.
2 FOR LEG FABRICATION, SEE DRAWINGS NUMBERED:
C760013, C7600144, C760016, C760017,
C760013, C7600144, C760017,
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C760017, C7600144, C760017,
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THIS DIAGONAL OF EACH— SECTION IS TO BE ON THE OUTSIDE OF THE LUG ELEVATION VIEW



 $(7S 1/2 00 \times 16 GA)$   $(7S 1/2 00 \times 16 GA)$  7YP 7OP AND BOTTOMOF ALL SECTIONS

TOWER AXIS

,91/11/11-1

AN VIEW

-2.10-

73/8"

1/2 × 11/2 BOLT ASSEMBLY (TYP) TS 1/2"00 x 16 GA,

EXAMPLE 84HXC = 15-2 3/16"

ALL STANDARD SECTIONS, EXAMPLE 83PX = 20-0"

PT NO KB35

\* TRANSITION SECTION WITH 7" FLANGE PLATES AT THE BOTTOM AND 6"FLANGE PLATES AT THE TOP 7" FLANGE PLATES MUST BE BETWEEN NO 85 SECTIONS AND ALL OTHER SECTIONS.

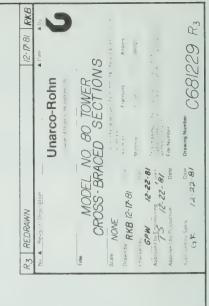
\*\* SECTION PART NUMBERS ENDING WITH AN "S" INDICATE THAT THE SECTIONS WILL HAVE STEP BOLTS ON ONE LEG FOR CLIMBING.

## GENERAL NOTES:

4-9 13/16 (TYP)

ALL "C" SECTIONS,

PAL NUTS ARE PROVIDED FOR ALL TOWER BOLTS.
2 FOR LEG FABRICATION, SEE DRAWINGS NUMBERED:
C760013, C760014, C760015, C760016, C760017,
C760018, C760019, AND C760020.
3 FOR BRACE FABRICATION, SEE DRAWING NUMBER B660719
4 FABRICATION DRAWINGS ARE FOR SHOP USE ONLY



2.4 29/32

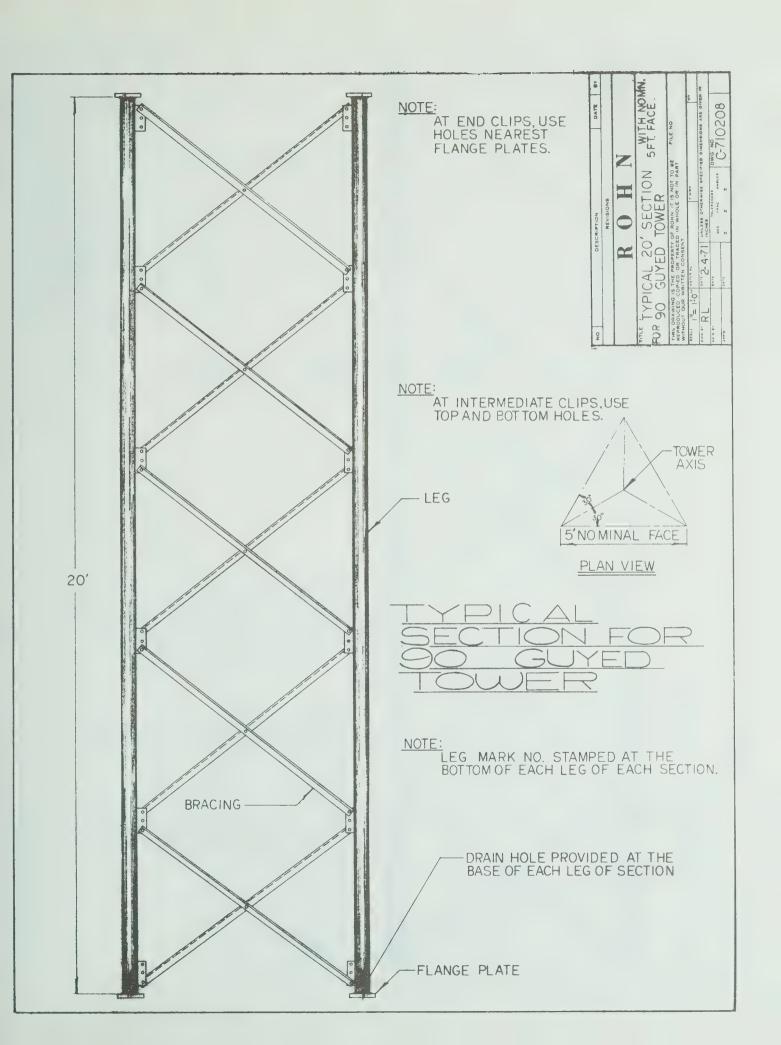
FLANGE BOLTS

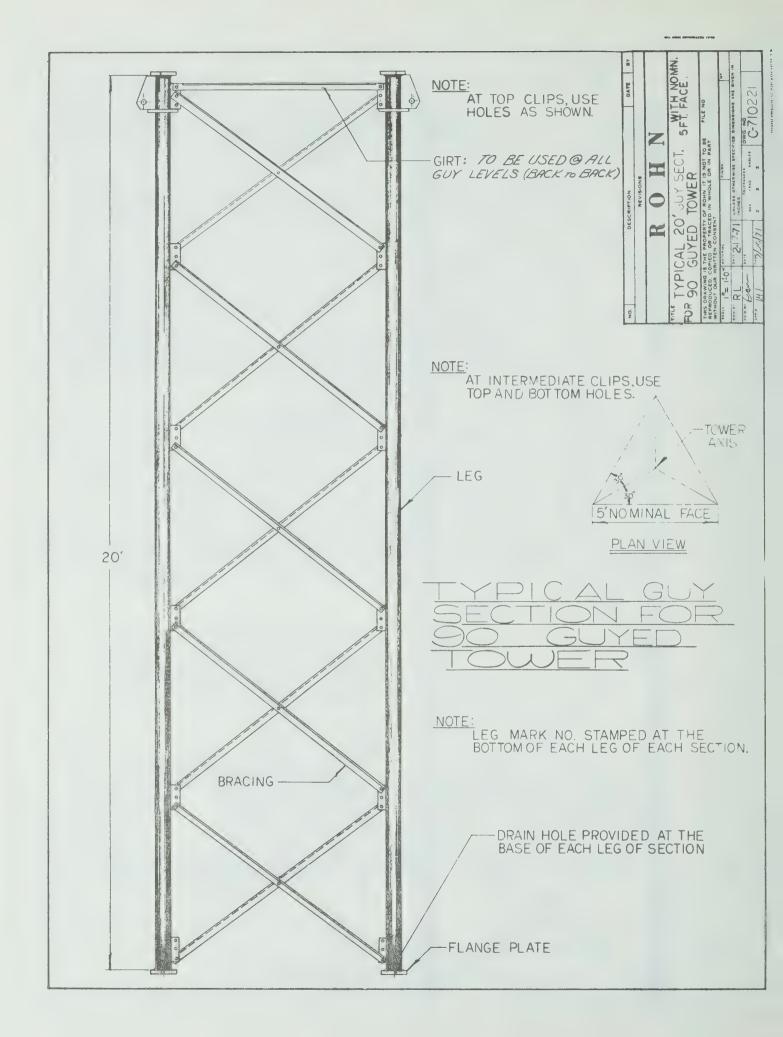
(SEE CHART)

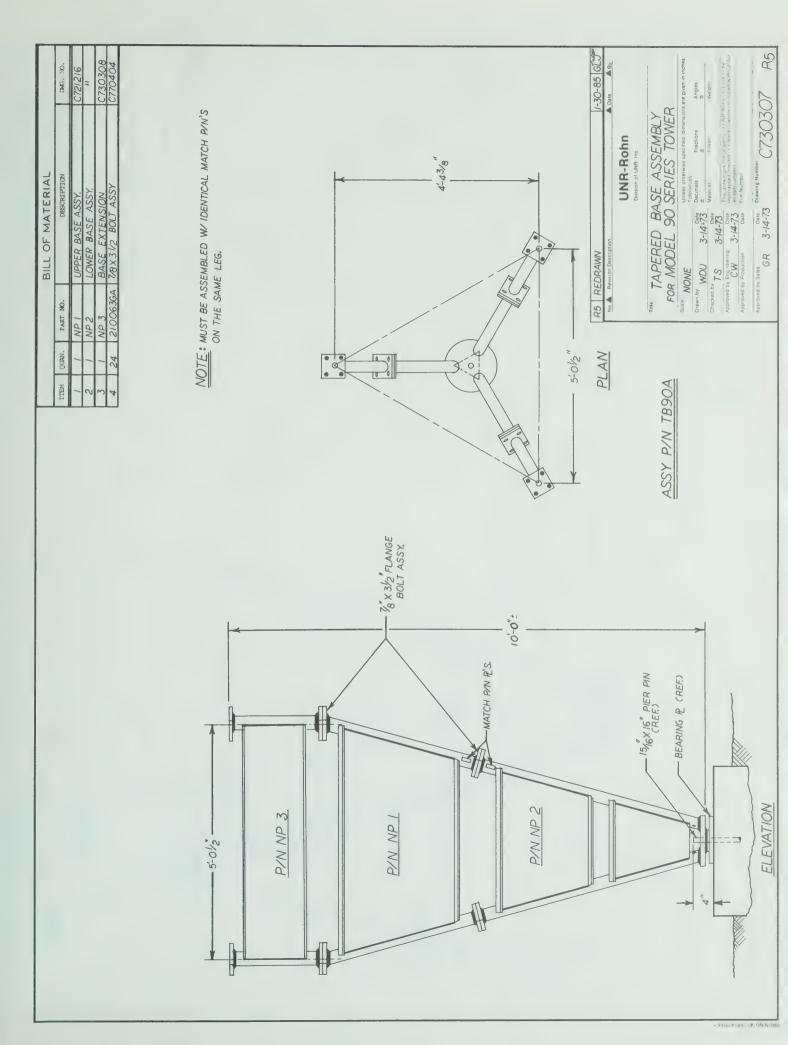
SECTION IS TO BE ON THE

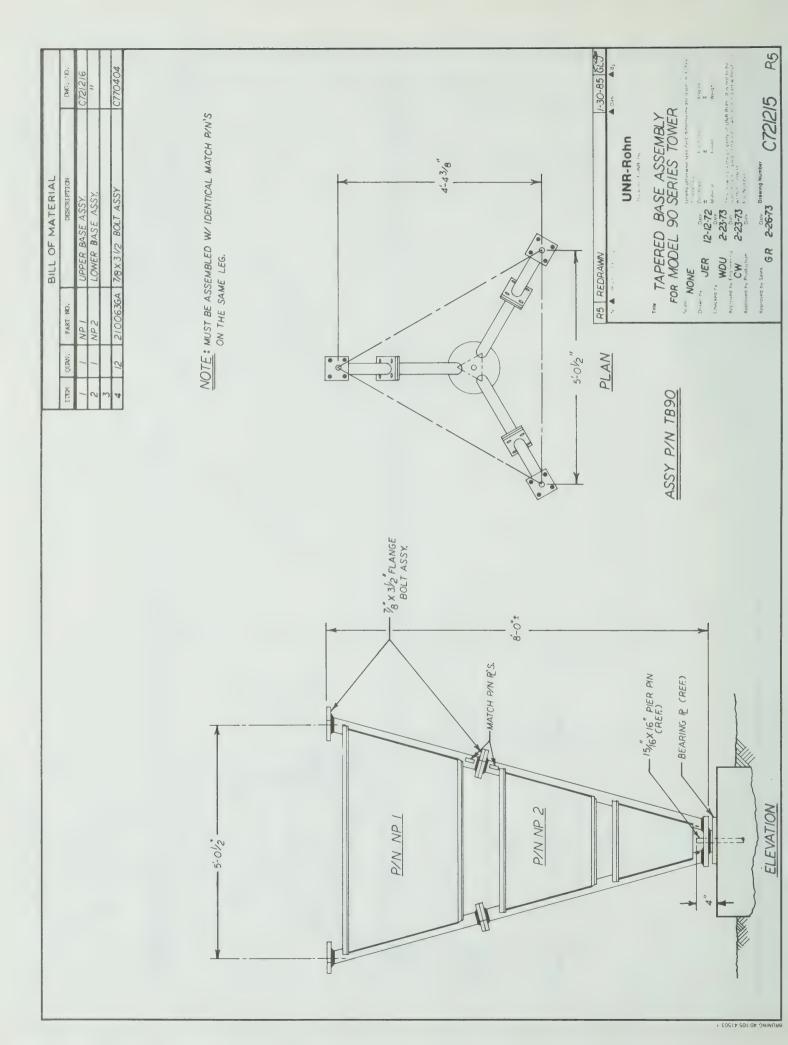
OUTSIDE OF THE LUG

ELEVATION VIEW









PRINTED IN U.S.A.



#### C TOWER

#### 24" - COMPONENT PARTS

PART NUMBER		WT.
C03	24" x 20' tower section	230
/ C03L* /	24" x 20' tower section w/lugs for torque arms 3' 7" tapered base	235
/ C28A /	Tapered base for Austin A4722B insulator	152
/ C28L /	Tapered base for Lapp 10027 insulator	146 188
C07	Joint bolt kit (includes 15 nuts & bolts)	5
C08	Brace bolt kit (includes 30 nuts & bolts)	4
C09S	Guy bracket assembly (intermediate)	61
/ C09T /	Guy bracket assembly (top)	71
C21A	Top plate and beacon plate	26
BP6	Bearing plate	25
15/16X16PP	Pier pin (one required for BP6)	3
SA253UA	Side arm assembly, 2-1/2' to 3' extension,	28
	with 2-1/4" O.D. support tube	
TACC6**	Channel torque arm, 6" (includes leg lug)	162
/ TACC8** /	Channel torque arm, 8" (includes leg lug)	210
C36	Base feet and bolts	38
DMCC4**	Side face dish mount w/4" (4-1/2" 0.D.)	92
	5' long standard pipe	
DMCC4TB**	Side face dish mount w/4" (4-1/2" 0.D.)	110
	5' long standard pipe and tie back angle	
/ WPCC65 /	Work platform	26

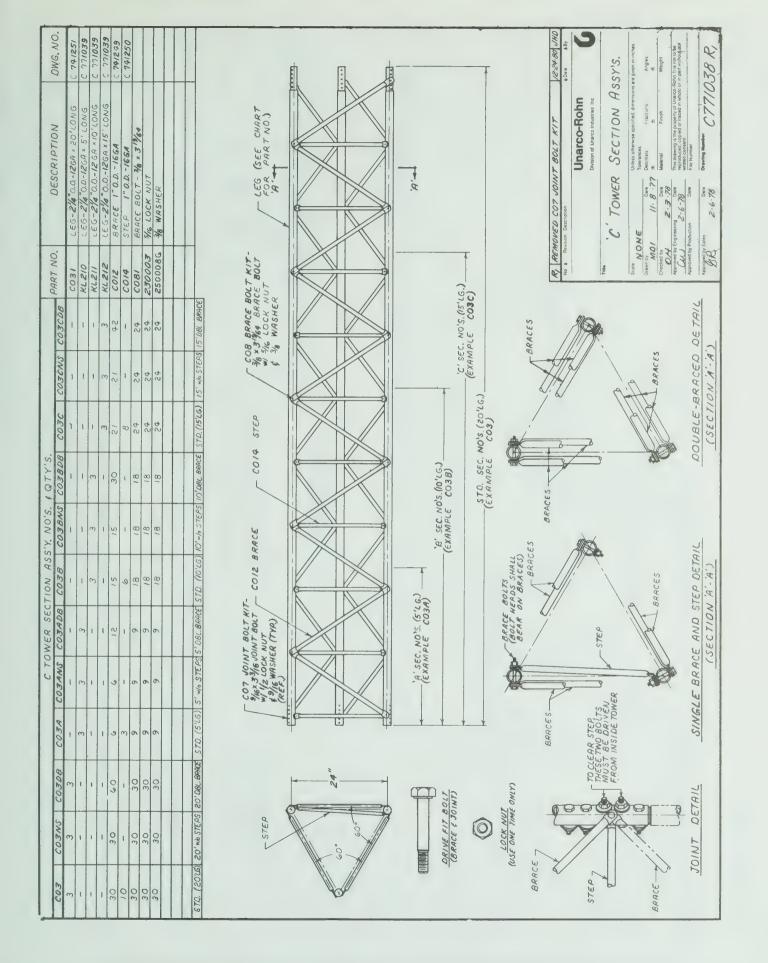
#### / Not a stock item. Allow sufficient time for fabricating. /

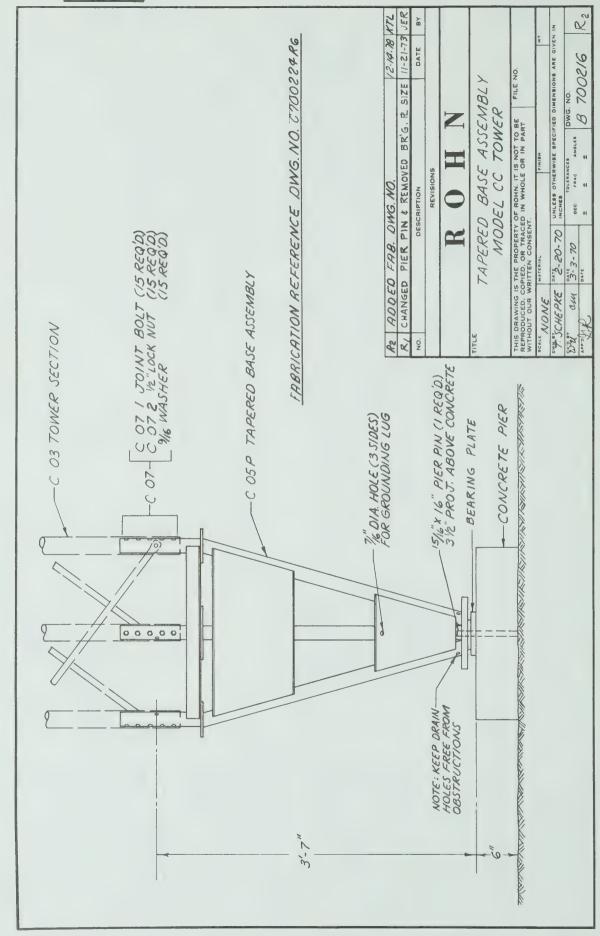
Prices available upon request.

<sup>\*</sup>Determined by distance in feet from base to lug. See appropriate engineering drawings for elevations.

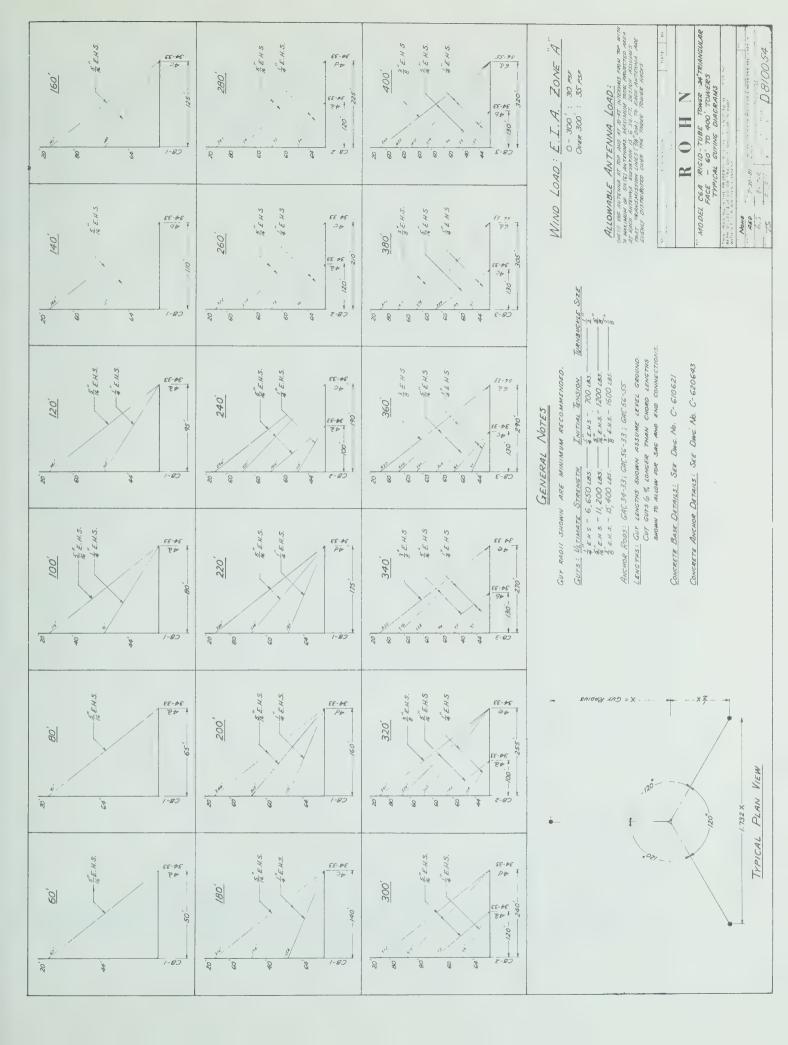
<sup>\*\*</sup>This item is not to be used without proper design consideration.







PRINTED IN U.S.A.



Each size guy wire shipped in one piece.

C6A T0WER

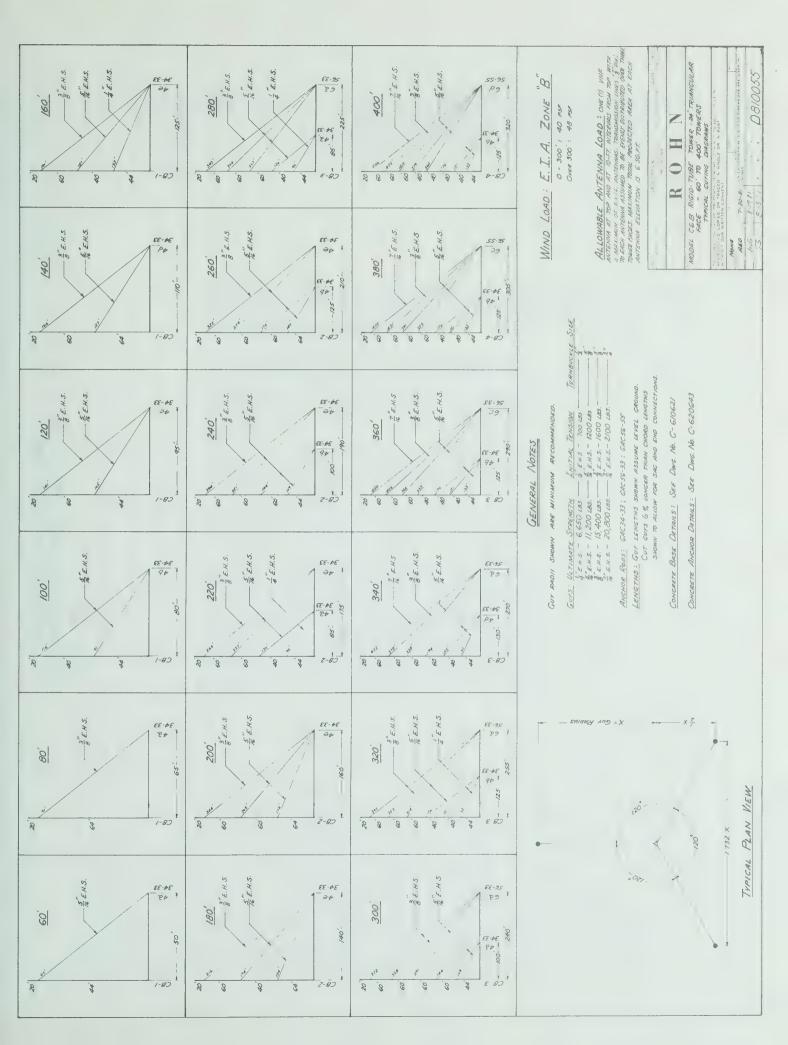
PARTS LIST P-369 (Replaces P-361)

GROUND MOUNT - ZONE "A" WIND LOAD

(36 Sq.

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Allowable Antenna Load in the	TOWER HEIGHT
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ITEM & PART NO.	60.	- 08	1001	150,	140 -	160 '	180 4	200 '	220 '	240 '	260 '	280 '	300 -	320 '	340 "	360 1	380	400 1
20' tower section CO3	m	4	2	9		ဘ	271	0.2	-	12	23	14	15	16	17	82	19	20
Tapered base section CO5P			_		_	_	_		_		-	_	-	_	-	-		-
Bearing plate BP6 w/ 15/16X16PP	-	-	_	-	-		-	-	-	-	-	_	-	_	-	-		
Joint bolt kits CO7	2	m	m	4	3	9	9	7	00	00	6	10		=	=	12	2	13
Intermediate guy bracket C09S	_	-	2,	~	~	~	m	m	m	4	4	4	4	20	9	9	9	
Top & beacon plate C21A		_	_	promi	_	_		process.	-	-	_	-	-	-	-	_	-	-
Mast mount kit ClO	_	_	_	_	_	_		-	_	-	-	_	_	_	_	_	_	
Guy wire 1/4EHS			325'	350			1100'	1009	, 909	400,	1100.	1001:	500 1	1400 1	2150'	2250' 2	2300 1 3	3600"
Guy wire 5/16EHS	250'	300 '	400'	450'	10001	1125'	725.	1450'	1550	2200	1925	2050 : 3	2750	1550'	1850	2000	700.	21001
Guy Wire 3/8EHS														1300 1	1350 '	1450' 2	2850"	1600'
Cable clamps 1/4CCF			25	25			43	25	25	23	49	49	31	49	67	67	67	35
Cable clamps 5/16CCF	25	25	19	19	43	43	19	37	37	55	37	37	55	37	37	37	19	37
Cable clamps 3/8CCF														19	19	19	37	19
Thimbles 3/8ТНН	7	7	13	13	13	13	19	19	19	55	25	25	25	25	31	31	25	37
Thimbles 1/2THH														7	7	7	13	7
Turnbuckles 1/2TBE&J			2	m			9	m	m	m	9	9	m	9	6	6	D)	12
Turnbuckles 5/8TBL&J	3	2	8	3	9	9	m	9	9	6	9	9	6	6	5	6	6	6
Anchors GAC3433	2	m	m	m	2	m	m	m	m	9	9	9	9	9	9	m	m	2
Anchors GAC5633																m	m	
Anchors GAC5655																		m
Base grounding kits BGKEl	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Tower treating kits Tl						2	2	3	3	n	က	က	n	4	4	4	4	5
Anti-climb warning sign ACWS	-	-	_	-	-		-	_	-	-	_	_		-	_			_



C6B TOWER
GROUND MOUNT - ZONE "B" WIND LOAD

(36 Sq. Ft. of Allowable Antenna Load in the Top 50')

TOWER HEIGHT

Anti-	Tower	BGKE	An	cho	rs	3/4	5/8	1 ur	1/2	Thimbl	Cal	ole	Cla	amps	(	Suy	Wir	e e	Mast ClO	Top C21A	Inte CO9S	Joint CO7	Bea BP6	Tape COSP	20°	ITEM
i-climb warning sign	er treating kits	grounding	3AC5655	GAC5633	GAC3433	3/4TBE&J	1 urnbuckies 5/8TBE&J	/2TBE&J	himbles 1/2THH	himbles 3/8THH	7/16CCF	3/8CCF	5/16CCF	1/4CCF	7/16EHS	3/8EHS	5/16EHS	1/4EHS	t mount kit	& beacon plate	Intermediate guy bracket	nt bolt kits	Bearing plate BP6 w/ 15/16X16PP	apered base section	tower section	& PAR
_		2			ω		ω			7			25				250 '		_			2	_		ω	60'
_		2			ω		ω		7			25				350'			_	_		ω			4	80 -
ب		2			ω		6			13			43				700'		_	_	2	ω			5	100'
_		2			ω		6		7	7		19	25			450'	375'		_	_	2	4			6	120'
_		2			ω		6		7	7		19	25			550 '	450'				2	σ <sub>1</sub>		_	7	140'
_	N	2			ω		6	ω	7	13		19	19	25		6251	500 1	500 1			ω	ഗ	-1		∞	160'
_	N	2			ω		9		7	13		19	43			700'	100' 1		_		ω	6		_	9	180'
_	ω	2			ω		9		7	13		19	43		_	1 008	1250' 1		_		ω	7			10	200'
_	ω	2			6		9	ω	7	19		19	37	31		900 '	100 1	500 '	_	_	4	7	_		=	220'
_	ω	2			6		12		7	19		19	67			9501	700 ' 2			_	4	00			12	240'
_	ω	2			6		12		7	19		19	67			1050 1	000			_	4	9		-	13	260'
	ω	2		ω	ω		12	ω	7	25		19	55	31		1100 1 2	2200 1	500 1	_	_	ن ت	9	1		14	280'
	ω	2		ω	ω		15		13	19		37	67			2250 2	1800 1		_	-1	ഗ	10	-1	_	15	300 '
_	4	2		ω	ω		12	6	<u>3</u>	25		37	37	49		2400' 1	1600 ' 2	1000 '	_	1	6	10	<u>س</u>		16	320 '
_	4	2		ω	ω	ω	15		13	25	25	19	85		1350 1	1200 1	2750 3			_	6	=	1		17	340'
_	4	2	ω		ω	ω	18		13	31	25	19	103		1450 1	1300 1	3800' 4				7	=	1	<u>ت</u>	18	360'
_	4	2	ω		ω	ω	18		13	ω	25	19	103		1525' 1	1400 1	4000' 5				7	12	-1		19	380 '
-	(J)	2	ω		ω	ω	21		13	37	25	19	121		1600'	1500'	5250'		_	_	$\infty$	12		_	20	400 1

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

## All antenna installations must be grounded per local and national codes.

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## ROHN 75005R



- 7'6" FACE
- HEIGHTS TO 2,000 FEET
- SOLID STEEL CONSTRUCTION
- HOT DIP GALVANIZED
- IDEAL FOR BROADCAST USE

#### GENERAL INFORMATION

The Rohn 7500SR tower is a 7'6" face guyed tower suitable for height requirements up to 2,000 feet. Ideal for broadcast use, with or without microwave, the 7500SR tower is constructed with solid leg and angle bracing members. The 7'6" face allows comfortable inside climbing with additional room for waveguides.

Torque assemblies are available when twist and sway requirements are critical. Reduced face width selections are also available for the upper portions of the 7500SR tower to minimize antenna interference effect.

A standard tapered base provided with the 7500SR tower means lower foundation costs. The tapered base also helps insure foundation settlements will not transfer stresses to the tower.

All 7500SR member connections are bolted versus shop welded. The knocked down construction allows for convenient shipping and future upgrade of bracing.

#### ENGINEERING/SALES

Rohn's professional engineering and drafting department works closely with a knowledgeable sales staff to make certain each tower meets all requirements for a specific installation.

A state-of-the-art Computer Aided Design and Drafting System allows for tight manufacturing tolerances resulting in a straight and rigid tower, easily erected, while eliminating member eccentricities for the optimum utilization of materials.

#### FINI5H

All Rohn towers are Hot Dip Galvanized after fabrication at Rohn's own in-house galvanizing facility to provide the ultimate in corrosion protection. A minimum of 2 ounces of zinc per square foot of surface is actually bonded to the steel to provide protection far superior to any painted coating.



#### QUALITY CONTROL

Quality Control is one reason Rohn towers have achieved a reputation for excellence and durability.

Strict Quality Control checks are built into each step of the design and manufacturing process. Rohn Quality Control procedures on weld testing use:

X-Ray
Dye Penetrant
Ultrasonic

#### **ABOUT ROHN**

Since 1948 Rohn has been a world leader in quality communication support structures.

Rohn's Hot Dip Galvanized towers can be found worldwide and range from small home television antenna towers to large broadcast and microwave towers.

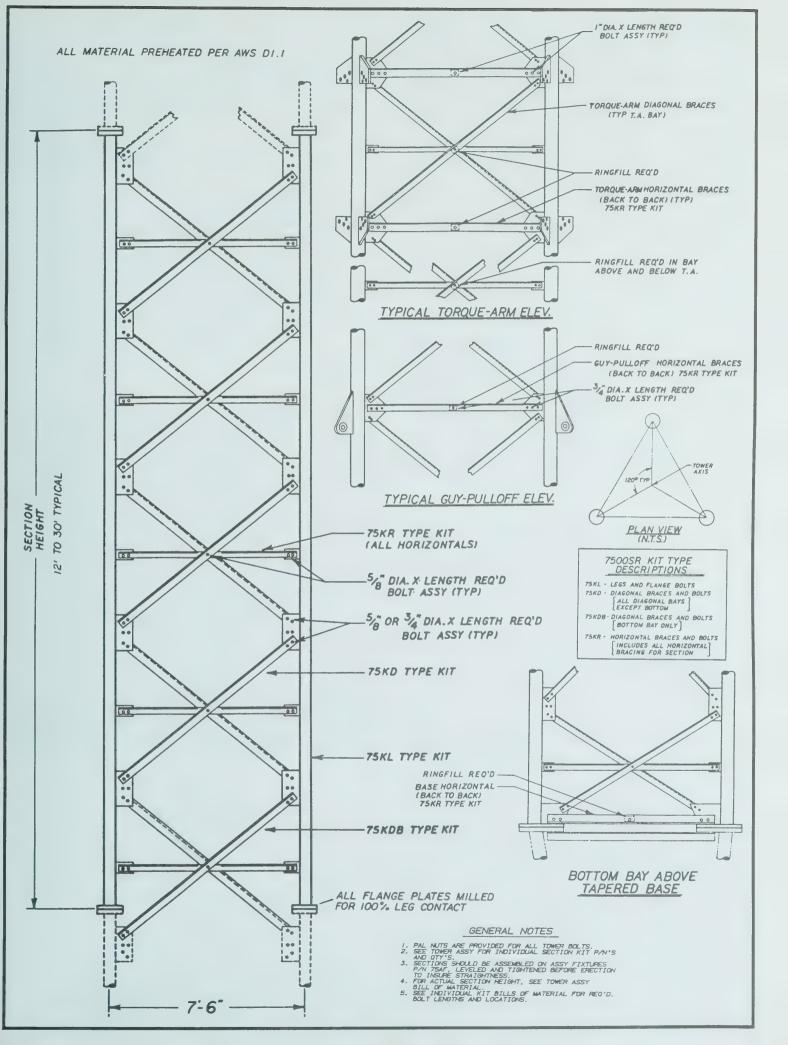
To complete the installation, fiberglass and concrete equipment shelters are available from Rohn. In addition to the construction of shelters, Rohn's Birmingham, Alabama, facility will also install radio equipment and other hardware to complete the shelter installation.















#### CONSTRUCTION

Rohn's Construction Group provides expert tower erection service anywhere in the world.

From foundations through tower erection and installation of antennas and waveguides, Rohn's Construction Group will guide the project carefully.

Rohn's Construction Group works closely with Rohn's engineering and sales departments to coordinate all aspects of the installation. This close communication can help eliminate many problems which might otherwise slow or complicate an installation.

Rohn's on-site experienced field supervisors provide a first hand, knowledgeable view of the installation for the Construction Group's main office at the Peoria, Illinois, facility.



### ROHN

6718 W. Plank Road Peoria, Illinois 61656

Phone: 309-697-4400 TWX: 910-652-0646 FAX: 309-697-5612

Form No. 87-2121 Copyright 1987 ROHN. All rights reserved Specifications subject to change without notice. Printed in USA.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

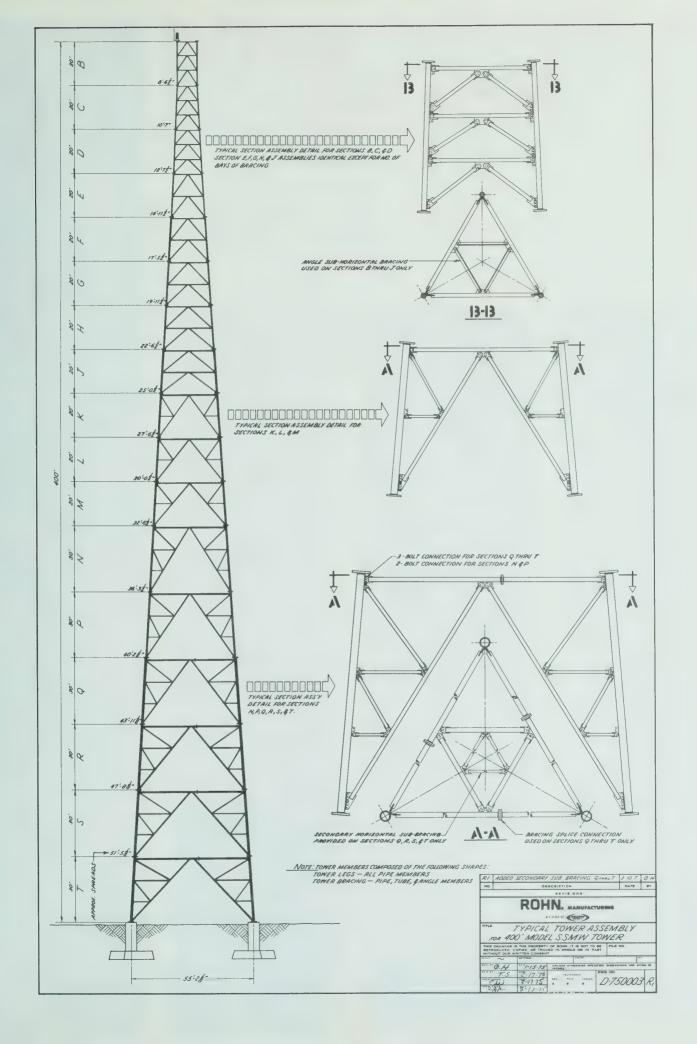
## All antenna installations must be grounded per local and national codes.

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ROHN

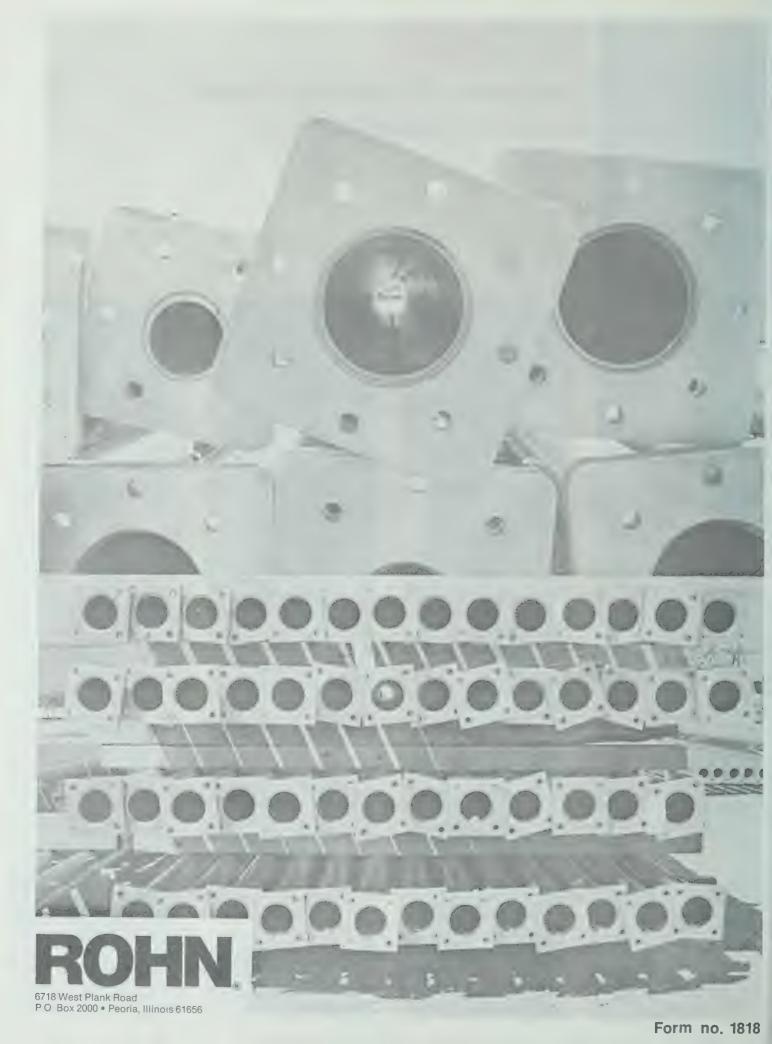
Continuing Strength and Quality For Every Tower Need







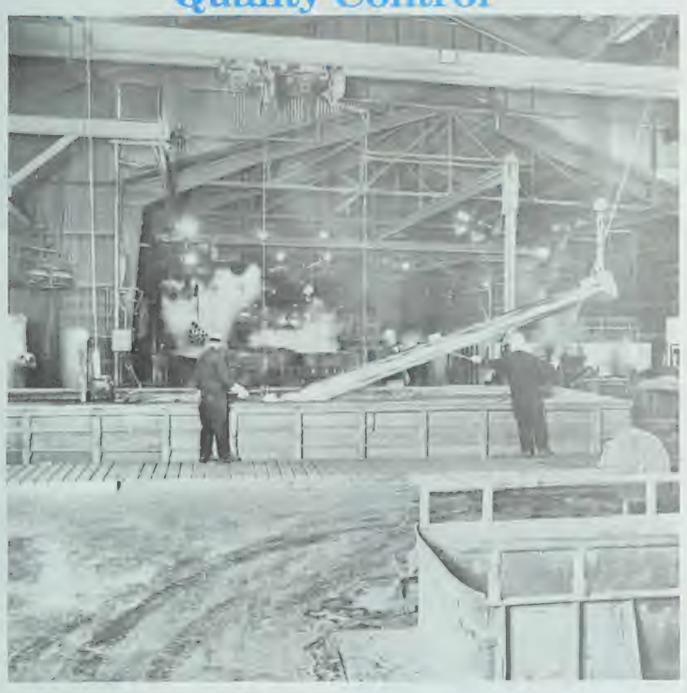
Form No 82 1821



ROHN. IN-HOUSE

# HOT DIP GALVANIZED

"Quality Control"

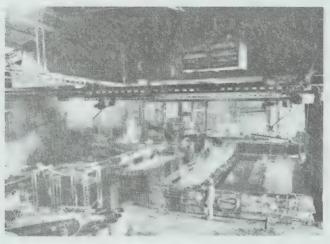


Just one of the many assets contributing to the continuing strength and quality at ROHN.

# Rohn Will Give You Quality With Galvanized Protection



Additional 25' × 5' Kettle for Smaller Hardware



One of the Largest and Most Efficient Hot Dip Galvanizing Facilities in the USA.



Chemical Treatment to Protect Galvanized Finish



Quality Control Check After Hot Dip Process

Rohn maintains stringent standards on Quality in our designing, engineering and steel fabricating. The galvanized coating used makes us superior to any other type of coating. No chipping, scratching or peeling that lends itself to rust and deterioration.

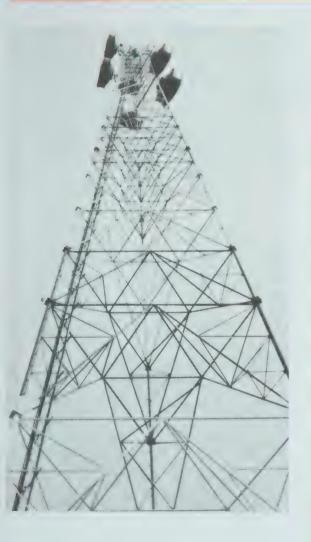
Hot-dip zinc galvanizing means that ROHN products are absolutely corrosion-resistant. A minimum molten zinc coating of 2 ounces for every square foot of surface fuses permanently to the metal, becoming an actual part of the steel. The tubular steel used in ROHN Towers is coated both inside and outside to give absolute protection from condensation and moisture.

With ROHN Products, you receive the very finest available—anywhere. All Hot-Dip Galvanizing is done in the ROHN In-House Galvanizing Plant according to ROHN Rigid Controls for Highest Quality.

6718 West Plank Road P.O. Box 2000 • Peoria, Illinois 61656 Phone: 309-697-4400

Form No. 82 1808

# COMMICATION TOWERS



Here is a superbly designed, unique tower series that fills a wide range of needs because of their extraordinary versatility! Widely used for all types of communication, broadcasting, microwave and industrial needs, the ROHN SSV series has many outstanding features to make it worthy of consideration for your requirements.

# Outstanding Features of the ROHN "SSV" Series Towers . . .

- Designed for a minimum wind load of 30 psf. Towers requiring higher wind or ice loads are no problem due to the tower's amazing versatility.
- Standard designs available in heights to 500 feet depending on loading. Special towers available depending on specific requirements.
- The SSV series make use of primarily knock-down construction for on-site assembly, which reduces shipping costs.
- Towers for minimal loadings are available in welded construction in heights up to 60 feet, shipped in 20 foot sections.
- All components and hardware are Hot Dip Galvanized after fabrication with a zinc coating per E.I.A. Standards.
- All ROHN SSV series towers are engineered, designed and fabricated to meet or exceed latest E.I.A. specifications.

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers. All towers and masts should be installed and dismantled by experienced and trained per-

sonnel.
All types of antenna installations should be thoroughly
inspected by qualified personnel and remarked with
hazard and warning labels at least twice a year to insure
safety and proper performance.

All antenna installations must be grounded per local and national codes.

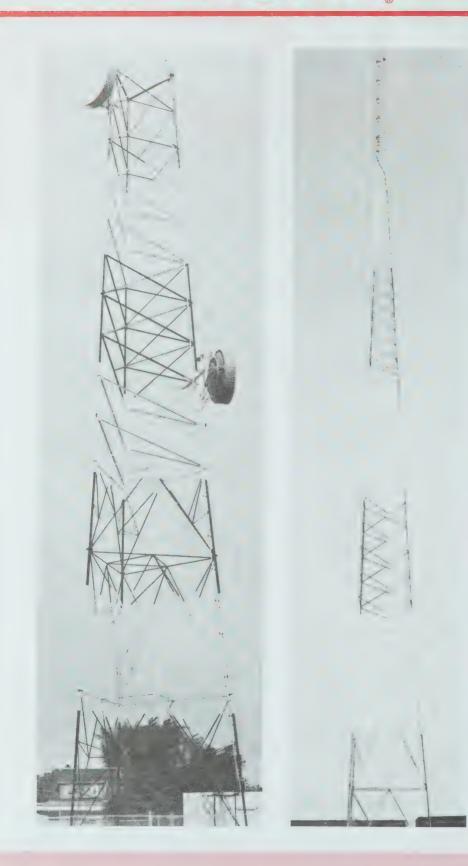
The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

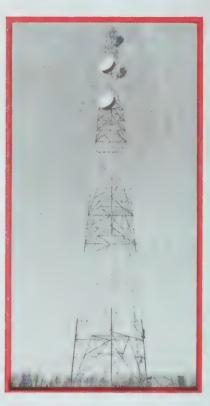
### ROHN

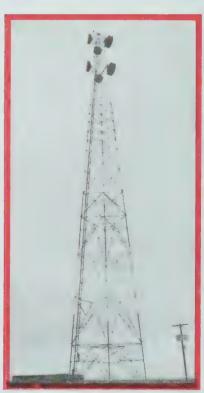
6718 West Plank Road P.O. Box 2000 • Peoria, Illinois 61656 Phone: 309-697-4400 TWX 910-652-0646 U.S.A.

FORM NO. 74342 PRINTED IN U.S.A

# EXAMPLES OF ROHN SSV TOWER INSTALLATIONS



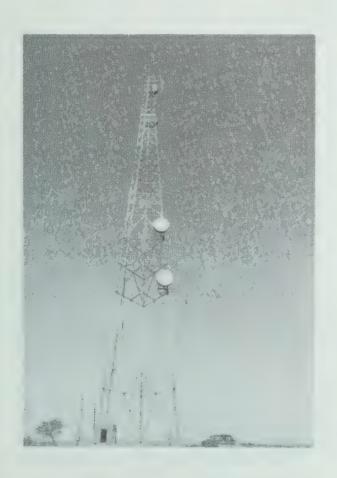




MICROWAVE / BROADCASTING / COMMUNICATIONS









UNR-Rohn
Division of UNR, Inc.
6718 West Plank Road
Peoria, Illinois 61601



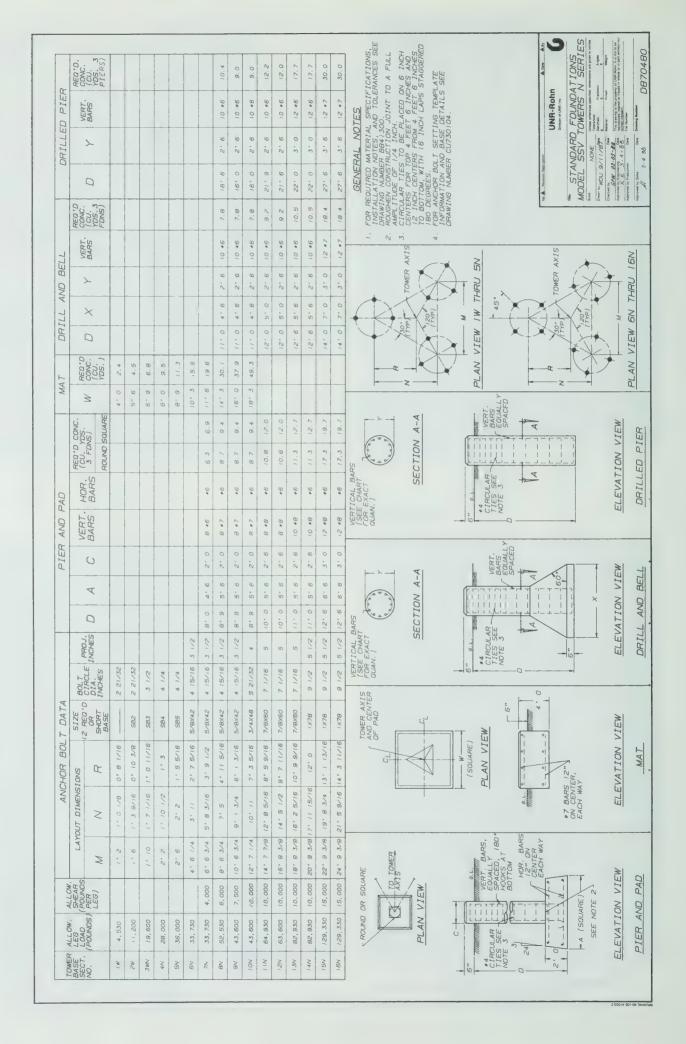






FORM NO. 74540-2

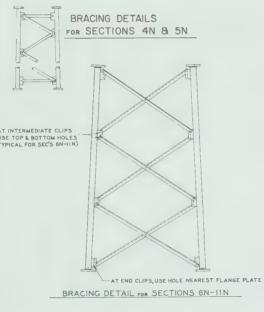
		200											
TION	2	W     DWG.4730088		NAWA N				TOWE	R SCHEDL	ILE			
WELDED CONSTRUCTION	1			ZVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV	SECTION NO.	SPREAD D UPPER		TOWER LEGS	TOWER BRACES MIN. 33 KSI YIELD STR.	FLANGE		FLANGE	BRACE
LSNC		2 W OW6.173009/			I W	1 <sup>1</sup> -2"	LOWER	9, "Ø SOLID	3" Ø SOLID	TOP 3 X 3 X 3/8 221/32"B C.	3 X 3 X 3/8 22/32/8 C	BOLTS	BOLTS
2 6		× × × ×			2 W	1-2"	i–6"	34 9 SOLID	3, Ø SOLID	2 <sup>2</sup> / <sub>3</sub> 2 <sup>3</sup> B C. 3 X 3 X <sup>3</sup> / <sub>8</sub> " 2 <sup>2</sup> / <sub>3</sub> 2"BC	2 <sup>2</sup> /32'8 C 2 <sup>2</sup> /32'B C	12-3/8 X1/2	NONE
ELDE	Married Marrie	0%%			3 WN	1-6	i–10"	15, " ø SOL ID	7 SOLID	3 X 3 X3/8	4 X 4 X 1/2	12-/2 X2"	NONE
	+				4 N	1-10	2-2"	1/4 Ø SOLID	5/8" Ø SOLID	4 X 4 X 1/2 3 /2 B C 4 1/2 X 4 1/2 5/8 4 1/4 B C	4 1/4"B C	12-5/8 X2 1/2	
ALL.	20.2	5 W N 0W6.A730037			5 N	2-2"	2-6"	17/6 Ø SOLID	5 SOLID	41/2 X 41/2 5/8 4 /4 B C	41/2 X41/2X5/8 41/4"B C	12-5 <sub>8</sub> X21/4	72-3/8×1/2
1	N	S. 41.			6 N	2-6"	46/4	2 Ø PIPE	L1/2 x 1/2 x /8	4/2X4/2X/2 4/4" B C	5 X 5 X 9/4' 4 5/16" B.C.	12-9/8 X21/2	
1	V	30		E-04 T	7 N	4-6/4	6-63/4	2 " Ø PIPE	∠ 1½×1½×1/8	5 X 5 X3/4" 415/16" B C		12-5/8 X21/2	+
1	1	110	N4 2 N4 4 N4 6		8 N	6-63/4	8-634	2/2 Ø PIPE	∠ 1½ × 1½ × ½	5 X 5 X3/4" 4 <sup>15</sup> 16" B C 5 X 5 X3/4"	4!5/16" B, C.	12-% X2/2	-
7	0 2	4N %. Ma. VL345 %. A730110	N 4 8 N 4 10	N4 7	9 N	8-6 <sup>3</sup> / <sub>4</sub>	10-634	2½ Ø PIPE	∠ 1 <sup>3</sup> / <sub>4</sub> × 1 <sup>3</sup> / <sub>4</sub> × 1/8	4 <sup>15</sup> /16" B C	415/16' B C	12-5/8 X2/2	
,	,	2 6 %	N 4 14		ION	12-71/4	12-7/4	3 g PIPE	L 2 x 2 x/8	4157,6"BC	6 X 6 X3/4" 5 <sup>2</sup> /32" 8 C *	12-9 <sub>4</sub> X2 <sup>3</sup> 4	-
	+		N 4 18	N 4 19 N 4 21 N 5 1	11 N 12 N	14-77/8	16-83/8	3½ Ø PIPE	∠ 2½ × 2½ × 3/6 ∠ 3 × 3 × 3/6	6 X 6 X <sup>3</sup> /4" 5 <sup>2l</sup> /32"B C 7 X 7 XI " 7 1/16" B C	7 X 7 XI * 7 1/16" B.C *	12-78 X31/2"	
		5N 7. NO. V1346 A730//9		N 5 5 N 5 7	13 N	16-83	18-8%	4 " Ø PIPE	∠ 3 x 3 x 3/6	7 X 7 XI"	7 <u>//6″ B C</u> ** 7 X 7 XI"	12- <sup>7</sup> / <sub>8</sub> X3 <sup>1</sup> / <sub>2</sub>	30-38XI/2
0	2	NC LEG PT. NO OWG. A.T.	N5 8 N5 10 N5 12 N5 14 N5 16 N5 18-		14N	18-83/8	20-93,"	4 " Ø PIPE	∠ 3½ x 3½ x ½*	7 X 7 XI"	9/2 ×9/2 XI/4		30-58XI34
		CEG PY.	N 5 16 N 5 18- N 5 20	- N 5   1 - N 5   13 - N 5   15 - N 5   17 - N 5   19 - N 5   21	15 N	20-93/8	22-93/8	5 " Ø PIPE	L 4 x 4 x 1/2"	7/16"BC 9/2X9/2XIV4" 9/2 BC		II.	
	1		N5 8	NS 21 NG 1	16 N	22-93/8	24-93/8	5 " Ø PIPE	L 4 × 4 × 1/4"	9/2X9/2XI/4" 9/2" B C	9/2"BC 9/2 X9/2X1/4		30- <sup>5</sup> / <sub>8</sub> XI <sup>3</sup> / <sub>4</sub> "
	02	0N 1E6 PT.NOS. 12347 EV13478 DWG.A780200		-N6 2	* AST	ERISK INDI	CATES TH	AT THE BOT	TOM FLANGE R.				ET.
100		NOS. 713485 90139		-N7 I N7 2 -N7 3	S	201	RACING DI	ETAILS NS 4N & 5N	_		W.F.10	21170	
	1	( N 1266 P.T. 113,48 & 1	K	- N7 4						SEC.		BRACES	TOTAL
	+		k	-N7 5 -N8 I	1		TR		<b>a</b>	-		IBRACES	TOTAL
	Î	ON 166 PT. NOS. VL349 & VL349S DWG. A780252	k	- N8 2						1 W		-	160
00	2	N 0 0 N	k	- N8 3						3 W			230
		2000	K	- N8 4				The state of the s		4N	260	175	435
	-	to .	—K	- N9 I	AT INTERM	EDIATE CLIPS		*	M .	5 N	345	195	540
		9 N LEC PT, NOS. VLSSB & VLSSBS DWG, A180316	K	_ N9 2		BOTTOM HOLE OR SEC'S 6N-II				6 N	290	190	480
20	2	200 115594 0146,470	k	$\sim$						7 N	300	245	545
	Y	333		N9 3						8 N	426	274	700
	1	NOS. VL3538 10385		N 10				.//	7	9 N	420	300	720
200	2	Z 7. 5 1/2		- N10	2					ION	_	400	830
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BOLTED		1.66 17.30 DWG.		NII - NII	3	BR	ACING DE	TAIL FOR SE	CTIONS 6N-IIN	- I6 N		2,150	3,305
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	+		K			45	f.			5. ALL TOWER		HOT-DIPPED	GALVANIZED
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100	Q 4		K		114 2			/					
		CASP.									PIECE BRACING		
	1		1		415 1		/				IAN BRACING		2-6-85 V. NO's. 6/2/79
20,		NR 11363 11790068								R4 CHANGED	14N, 15N, #16N	BRACE MAT'L	& WT'S 12-10-73
0	1			1	HI5 2	3	//			R2 SECT. 3	WE SAW NWS		7/6/7
	1	166 P.								RI SECTIO	DESCRIPT	ION	8 5N 5/5/7
	1	4363	-	/	H16 1		- AT END CLI	IPS, USE HOLE NEAF	REST FLANGE PLATE		Unard	co-Rohn	T <sub>4</sub>
100	2	10 N S PT. NO. VESO VE. A 730062				BRACI	NG DETAI	L FOR SECTION	DNS 12N-16N	YIYL E	MODEL S	SV TOWE	ER
	1	LEG PT. N OWG. A.			H16 2					THIS IRAWING IS	STANDA	RD SERIE	
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	-	5	0	N4 T N4 1 8N
	,	2 11.34	11106	N4 4 N4 5 N4 6 N4 7 N4 10 N4 9
	20,	58N 4N 4348 LEG PT. NO VL345	W. A.	N4 2 N4 3 N4 1 N4 4 - N4 3 N4 6 N4 7 N4 6 N4 7 N4 6 N4 7 N4 10 N4 11 N4 10 N4 11 N4 10 N4 11 N4 12 N4
	-	977 944	10 61	N4 20 N4 21 N4 8 N5 1 N5 2 N5 1
	20,	5N 2. No. W.	17901	NA 2  NA 3
		56 %	OWG. A	N5 14 - N5 13 N5 16 N5 15 N5 18 N5 17 N5 20 - N5 19
	-		300	101
	20,	6N 6N 6N 6N 6N 6N 6N 6N 6N 6N 6N 6N 6N 6	4780.	-N6 2 **
	N	6N 160 PT NOS.	OWG.	N6 4 N6 5
	-	6	133	N7 1
	20,	7N 160 PT NOS.	A780	-N7 3
		160	OWG.	N7 5
320, NOMINAL	-	.50.	0252	-N8 I
2	20,	8 N 166 PT NOS.	. A78	-N8 3
- 32(		177	OW	-N8:4
		I 703.	03/8	USE TO
	20,	HN6	C. 476	N9 2
		7 3	9	NIO I
	ò	TI	78035	Nio 2
2	20,	IONH 266 P. NOS.	WG.A.	N10 3
NOITSINGS OFFICE	-	1	24	NII I
STOL	20,	IIN LEG PT. NOS	17804	NII 2
000	5	7/9/	WG.A	NII 3
1 L	7 -		7 900	NI2 I
		12 NH	A790.	
-	1	1.000	OWG.	-N12 2
	'	135%	0000	-NI3 1
	20,	13 NH	: A73	NI3 2
		1937	OWG	
		H	2000	H14 1
	20,	14 NH	.479	H14 2
		166	9 OW6	
		16NH ISNH 14NH I3NH I2NH I2NH I2NH ICONNENSSS LEGYNENSSS LEGYNENSSS LEGYNENSSS LEGYNENSSS	3006	
	20,	IS NH	15. A.7.	-HI5 2
		160	40 8	
	1	16 NH	90063	-HI6 1
	20,	161	V6. A73	———ні6 2
1	577		0,4	

320'TOWER ELEVATION

_			TOV	VER SCH	EDULE			
SECTION	SPREAD [	DIMENSION	TOWER LEGS	TOWER BRACES	FLANGE	PLATES	FLANGE	BRACE
NO.	UPPER	LOWER	50 KSI YIELD STR	MIN.33 KSI YIELD STR	TOP	воттом	BOLTS	BOLTS
IW	l'-2"	1-2"	% & SOLID	3/8"Ø SOLID	3 X 3 X 3/8" 2 <sup>21</sup> / <sub>32</sub> "B.C.	3 X 3 X 3/8" 2 <sup>21</sup> / <sub>32</sub> B.c.	12-3/8×11/2	NONE
2 W	l∸ 2″	1-6"	3/4"Ø SOLID	3/8 SOLID	3 X 3 X 3/8" 2 <sup>21</sup> /32 B.C.	3 X 3 X 3/8 " 2 <sup>21</sup> /32 B.C.	12-3/8×11/2	NONE
3WN	l'- 6"	1-10"	15/ ø SOLID	7/6 Ø SOLID	3 X 3 X 3/8" 221/32 B.C.	4 X 4 X 1/2" 3 1/2"B.C.	12-1/2×2"	NONE
4 N	1-10"	2-2"	1/4"Ø SOLID	5/8"Ø SOLID	31/2"B.C.	41/2 X 41/2 X 5/8° 41/4 "B.C.	12-5/8×21/4	72-3/8 X11/2
5 N	2'-2"	2-6"	1€ Ø SOLID	5/8"Ø SOLID	4/2×4/2×5/8 4/4'B.C	4/2×4/2×5/8" 4/4°B.C.	12-5/8×21/4	72-3/8×11/2
6N	2′-6″	4'-6 1/4"	2"Ø PIPE	4 1/2×1/2×1/8"	41/2×41/2×1/2" 41/4 B.C.	5 X 5 X 3/4" 415/16 B.C.	12-5/8×21/2°	75-1/2×11/4"
7N	4'-6 <u>¼</u> "	6-63/4"	2" Ø PIPE	41/2×1/2×1/8"	5 X 5 X 3/4" 415/16 B.C.	5 X 5 X 3/4"* 415/16"B C.	12-5/8×21/2"	75-1/2×11/4°
8N	6-63/4"	8'-63/4"	2/2"Ø PIPE	41/2×1/2×1/8"	5 X 5 X 3/4" 415/16 B.C	5 X 5 X 3/4" 415/16"B C	12-5/8×2/2	60-1/2×11/4"
9NH	8'-63/4"	10-63/4"	2/2"EH PIPE	L 13/4 × 13/4 × 1/8"	5 X 5 X 3/4" 4 <sup>15</sup> / <sub>16</sub> " B.C.	5 X 5 X 3/4"	12-5/8×21/2	45-1/2×11/4"
IONH	10'-63/4"	12-71/4"	2/2"EH PIPE	L2 X 2 X 1/8"	5 X 5 X 3/4"	6 X 6 X 3/4" *	12-3/4×23/4	45-1/2×11/4"
IIN	12'-7/4"	14-7%"	3" Ø PIPE	L2/2×2/2×3/16	6 X 6 X 3/4" 5 <sup>21</sup> /328.C.	7 X 7 X 1" *	12-7/8×3 1/2	45-1/2×11/4"
12NH	14'-7/8"	16-83/"	3/2"EH PIPE	43 x 3 x <sup>3</sup> / <sub>16</sub>	7 X 7 X 1" 7 1/16" B.C.	7 X 7 X 1" *	12-78×3/2	30-5/8×1/2
I3NH	16-83/8	18'-83/8"	4" EH PIPE	43 x 3 x 3/16	7 X 7 X I" 7 1/16" B.C.	7 X 7 X 1° 71/16" B.C.	12-78 X3 /2"	30-5/8 X1/2"
14NH	18-83/6"	20'-93/8"	4" EHPIPE	L 3/2×3/2×1/4	7 × 7 × 1" 7 1/6" B.C.	91/2×91/2×11/4** 91/2* B.C.	12-1 × 4 4	30-5/8×13/4
I5NH	20-93/8"	22-93/8"	5" EH PIPE	L4 X 4 X 1/4	91/2X91/2X11/4" 91/2"B.C.	91/2×91/2×11/4" 91/2*8.C.	12-1 × 4 1/4	30-5/8×13/4
IGNH	22'-93/8"	24-93/8"	5" EH PIPE	L4 X 4 X /4	9/2×9/2×1/4" 9/2"B.C.	91/2×91/2×11/4" 91/2" B.C.	12-1 × 4 1/4	30-5/8×13/4
<b>₩</b> AS	STERISK I	NDICATES	THAT THE BO	TTOM FLANGE	PL OF THAT S	ECTION IS OF	FSET	



	WEI	GHTS	
SEC. NO.	LEGS	BRACES	TOTAL
IW			116
2W			160
3WN			230
4 N	260	175	435
5 N	345	195	540
6N	290	190	480
7N	300	245	545
8N	426	274	700
9NH	535	305	840
IONH	545	400	945
IIN	570	840	1410
12NH	905	825	1730
13 NH	1050	910	1960
14NH	1110	1625	2735
ISNH	1530	2000	3530
IGNH	1530	2150	3680

OUTSTANDING LEGS OF ANGLES ARE UP AT INTERMEDIATE CLIPS, USE TOP AT END CLIPS, USE HOLE NEAREST FLANGE PLATE

BRACING DETAIL FOR SECTIONS 12NH-16NH

- GENERAL NOTES:

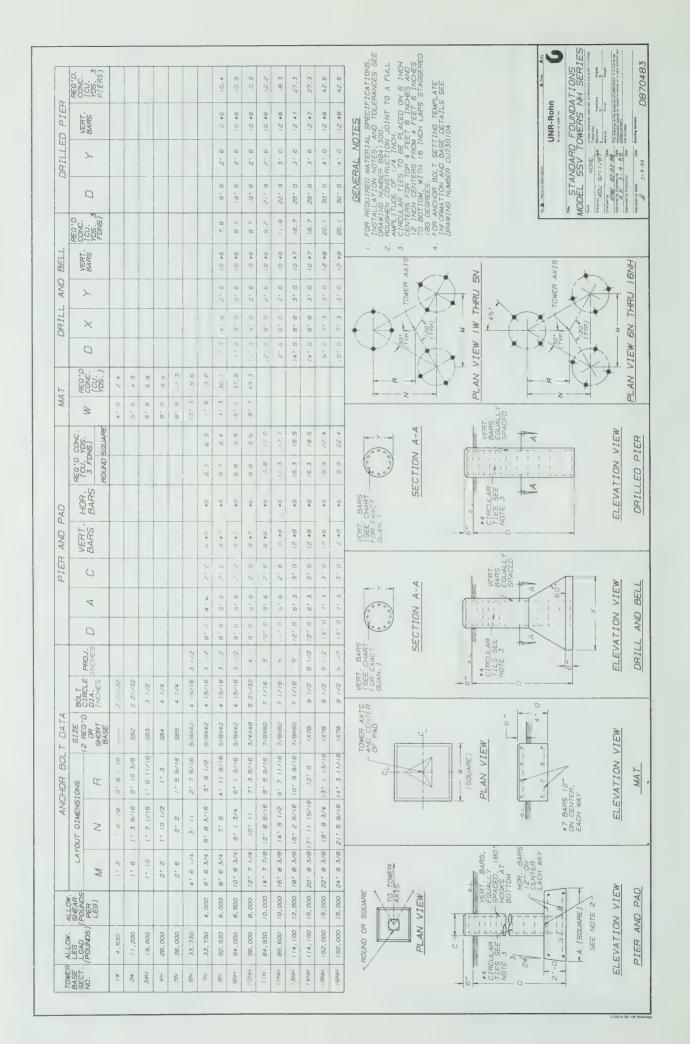
  1 (16 MAT NO. 15 SIMPLE) AT THE BOTTOM OF EACH
  LIG OF LICH BOLTED SECTION, SECTION NO. 15 SIMPLE
  LO A LOTTOM OF UNELEGAL FEACH WELLOS SECTION.
  2 ALL PART NO'S METAL STAMPED BEFORE GALVANIZING.
- 3 PAL NUTS PROVIDED FOR ALL TOWER BOLTS.
- 4 STEP BOLTS PROVIDED ON ONE LEG FOR SECTIONS 6N THRUIN, AND STEP BOLTS ON 3 LEGS FOR SECTIONS 12NH THRU16NH.
- 5 ALL TOWER MEMBERS ARE HOT-DIPPED GALVANIZED AFTER FABRICATION.

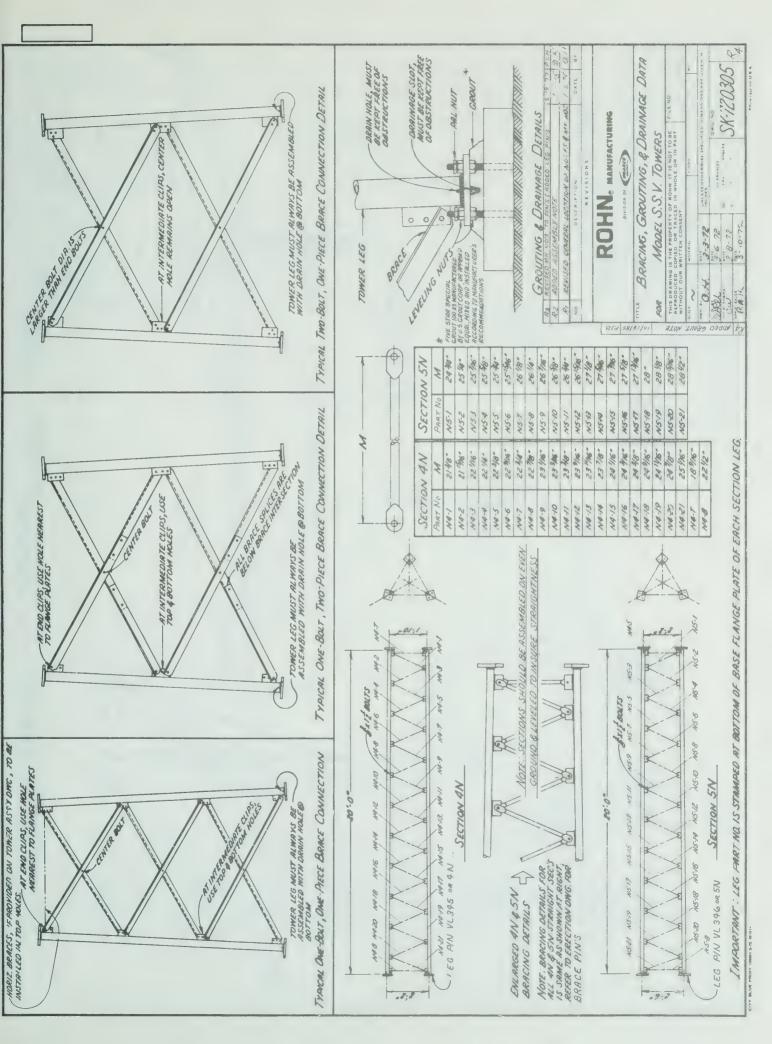
R8	REV. 2-PIECE BRACING TO I PIECE	9.25-85	JHD
R7	REVISED IANH BRACING & BOLT QTY'S	2-6-85	GLJ
-			. 9
85	REVISE GEN. NOTE NO. 1. ADD LEG PT. NOS.	6/2/79	618
R4	CHANGED IANH, ISNH, IGNH BRACE MAT'L & WTS.	12-10-73	JER
R3	FLANGE BOLTS IN SEC. AN WERE 21/2"LG.	2/3/72	GLS
82	SECT. 3WN WAS 3W	7/6/71	GWA
RI	SECS. 4W & 5W REPL. BY 4N & 5N	5/5/7	GWA
500	DESCRIPTION	GATE	BY
	REVIS ONS		
-		ATT .	

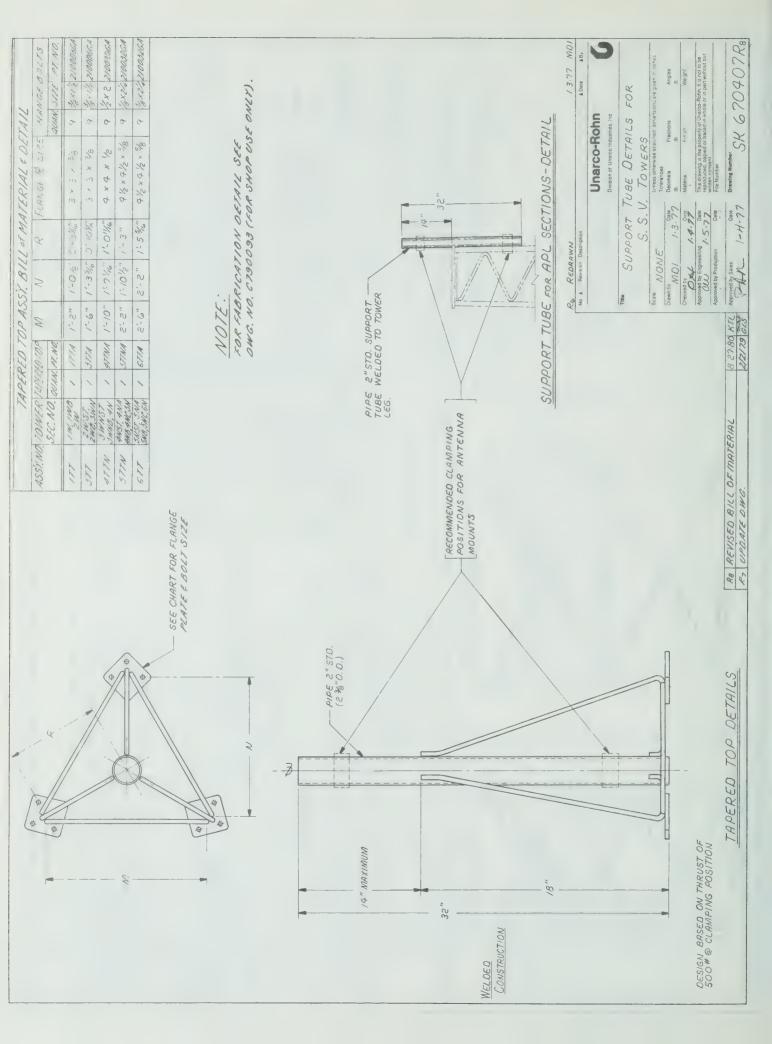
Unarco-Rohn

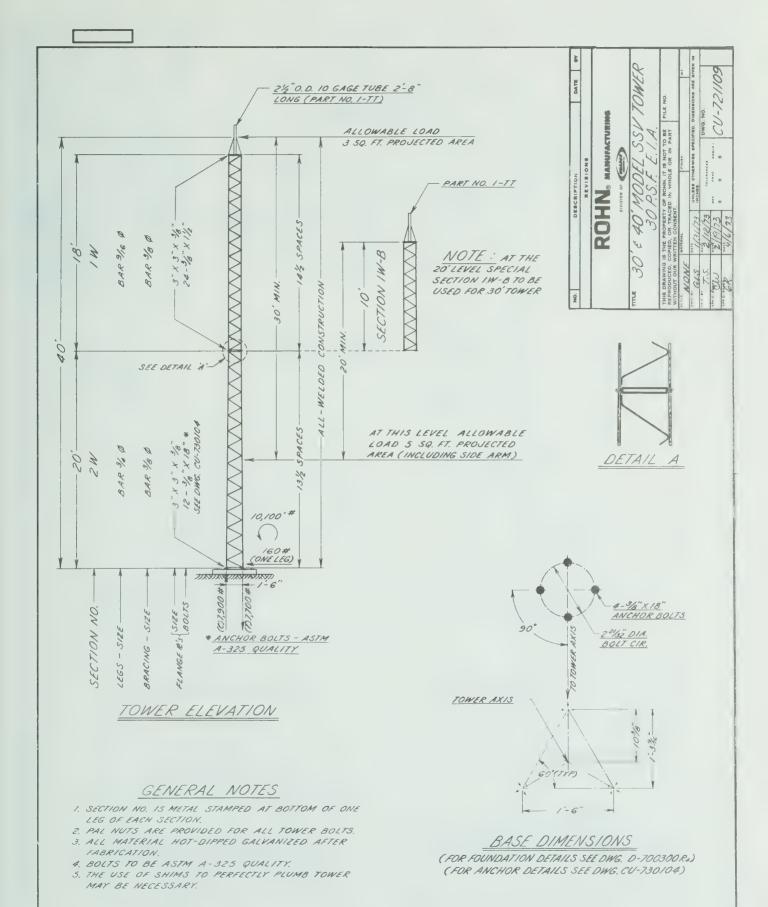
MODEL S.S. V. TOWER HEAVY SERIES

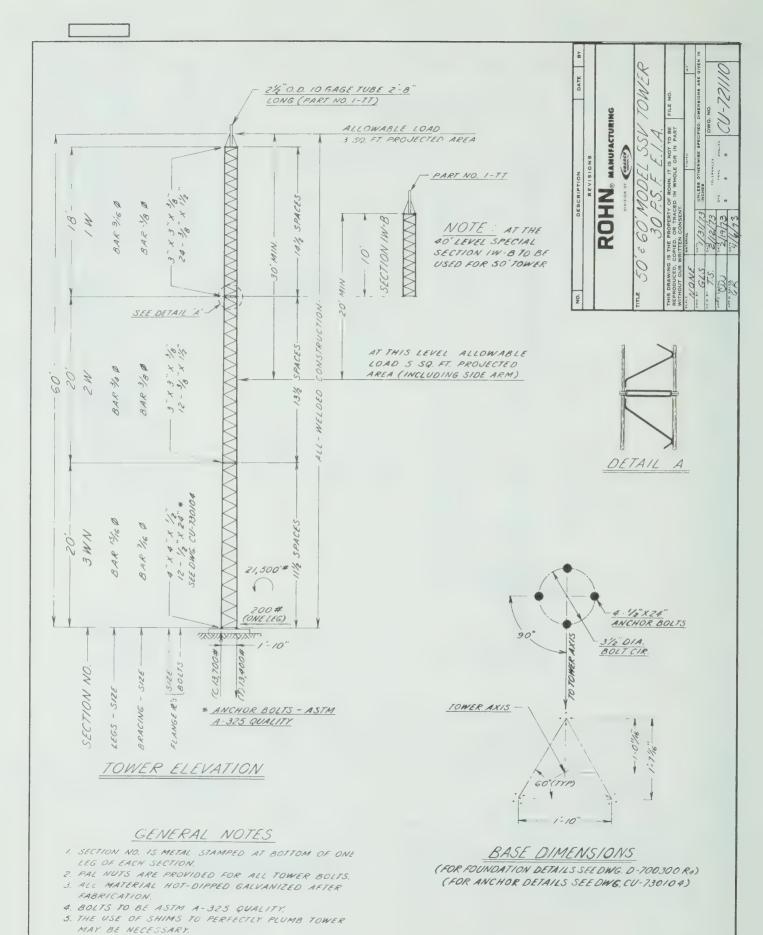
NONE 1 18-69 E 680101 R8

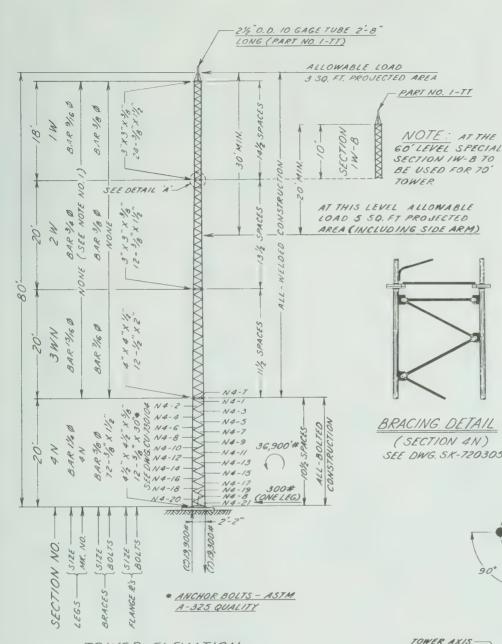


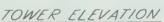






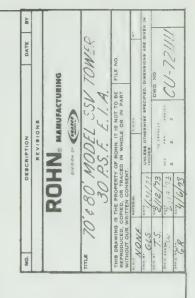


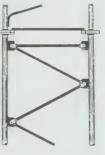




#### GENERAL NOTES

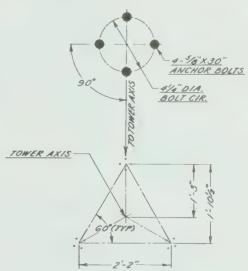
- 1. LEG MK. NO. IS METAL STAMPED AT BOTTOM OF EACH LEG OF BOLTED SECTIONS. SECTION NO. IS METAL STAMPED AT BOTTOM OF ONE LEG OF WELDED SECTIONS.
- 2. PAL NUTS ARE PROVIDED FOR ALL TOWER BOLTS.
- 3. ALL MATERIAL HOT-DIPPED GALVANIZED AFTER FABRICATION.
- 4. BOLTS TO BE ASTM A-325 QUALITY.
- 5. BRACE MR. NO. IS METAL STAMPED AT ONE END OF EACH BRACE (BOLTED SECTIONS ONLY).
- 6. THE USE OF SHIMS TO PERFECTLY PLUMB TOWER MAY BE NECESSARY.



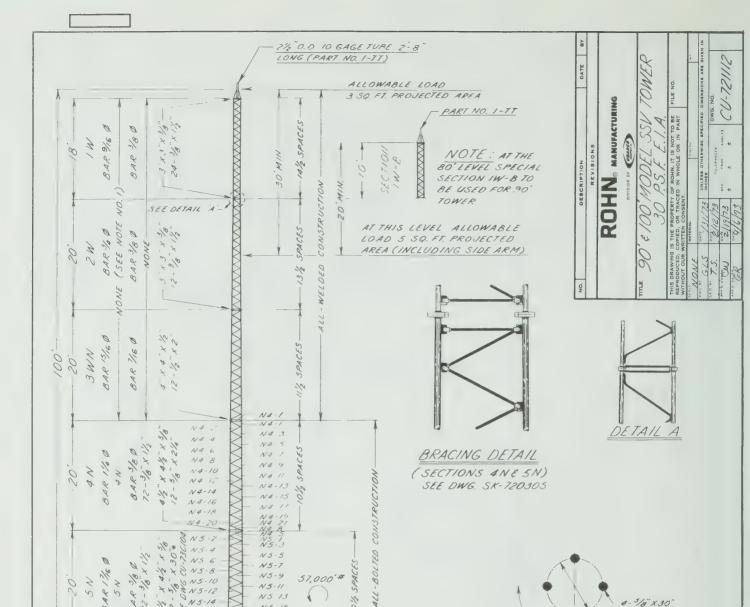


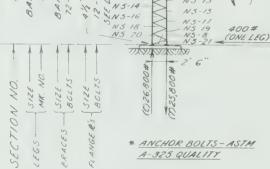
BRACING DETAIL (SECTION 4N) SEE DWG. SK-720305





BASE DIMENSIONS (FOR FOUNDATION DETAILS SEE DING. D-700300 Ra) (FOR ANCHOR DETAILS SEE DWG. CU-730104)





N4-14

N4-16 N4-18 N4-20

72-3/8 X 1/2 Ø

BAR 3/8

8AR 17/6

5 %

51

00

N4-13 N4-15 N4-17 N4-19 N4-19 N4-8 N4-8 N5-3

N5-5

N5-7 N5-9

N5-11 N5 13

ON SPACES

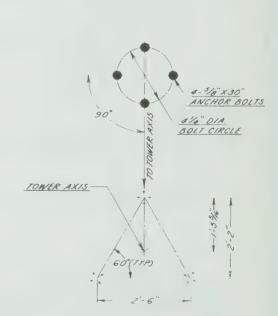
57,000 #

400#

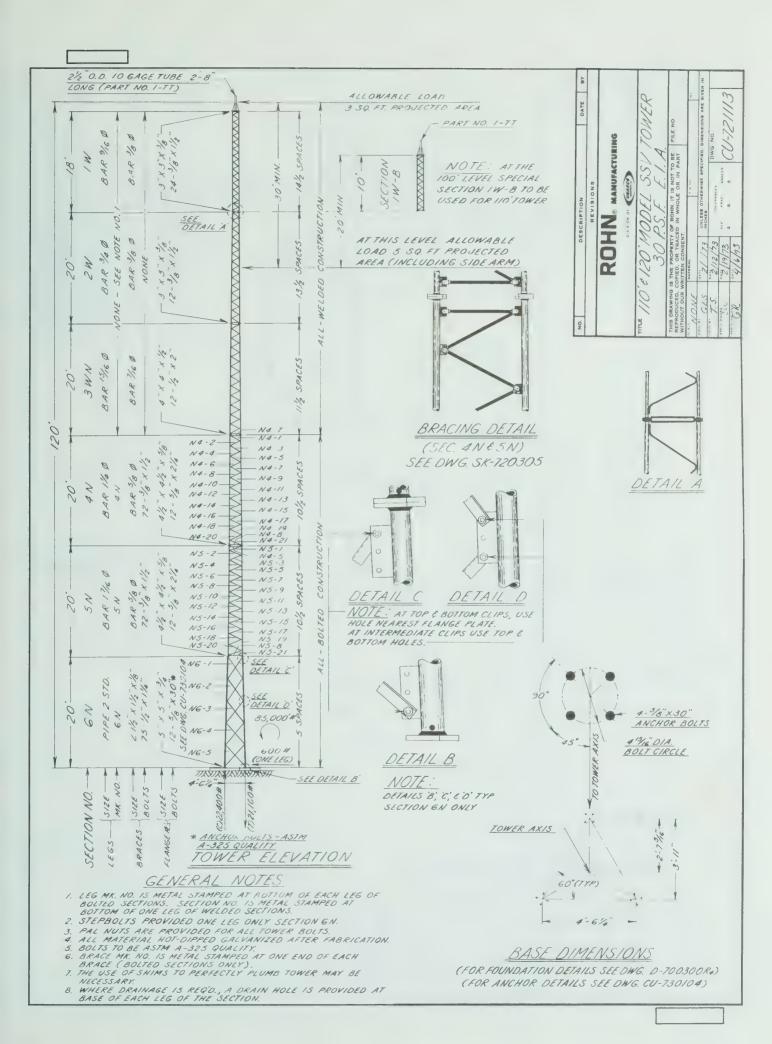
### TOWER ELEVATION

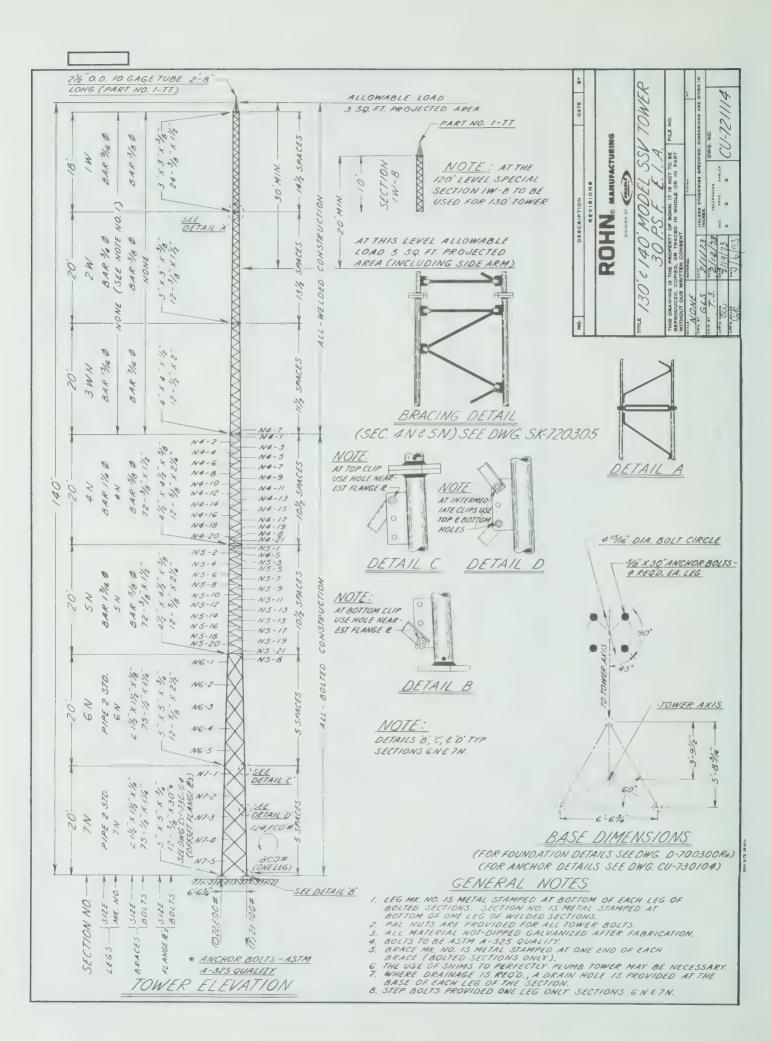
#### GENERAL NOTES

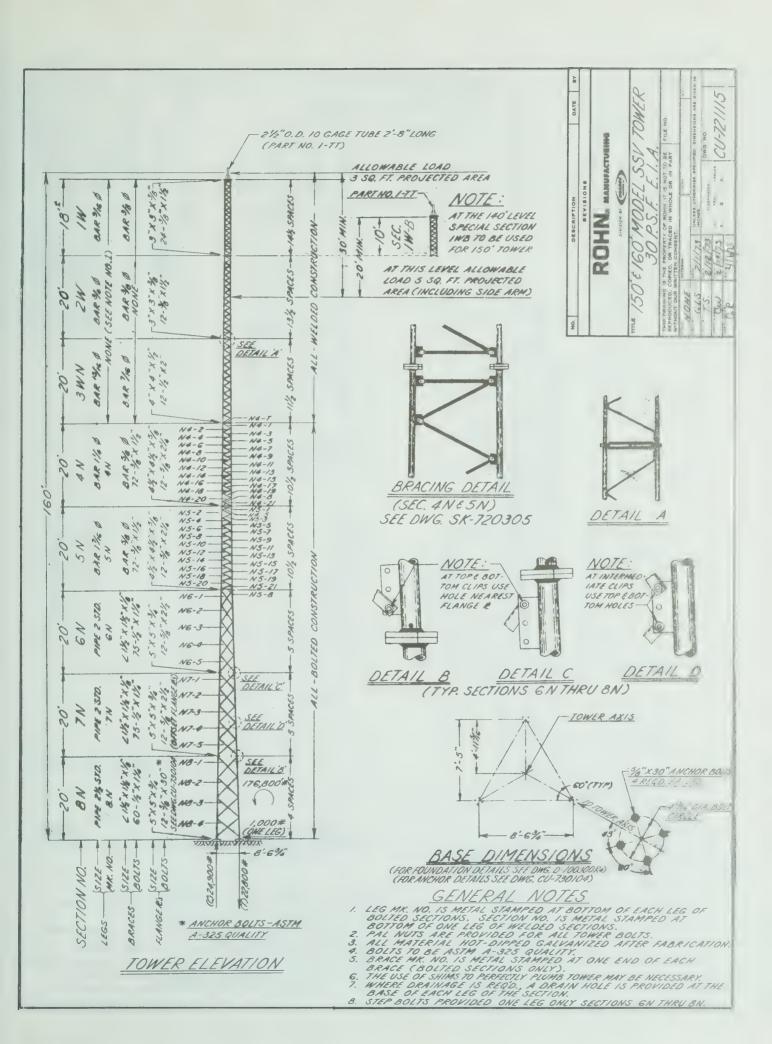
- 1. LEG MK. NO. IS METAL STAMPED AT BOTTOM OF EACH LEG OF BOLTED SECTIONS. SECTION NO. IS METAL STAMPED AT BOTTOM OF ONE LEG OF WELDED SECTIONS.
- PAL NUTS ARE PROVIDED FOR ALL TOWER BOLTS 3. ALL MATERIAL HOT-DIPPED GALVANIZED AFTER FABRICATION.
- 4 BOLTS TO BE ASTM A-325 QUALITY.
- S. BRACE MK. NO. IS METAL STAMPED AT ONE END OF EACH BRACE (BOLTED SECTIONS ONLY)
- 6. THE USE OF SHIMS TO PERFECTLY PLUMB TOWER MAY BE NECESSARY.

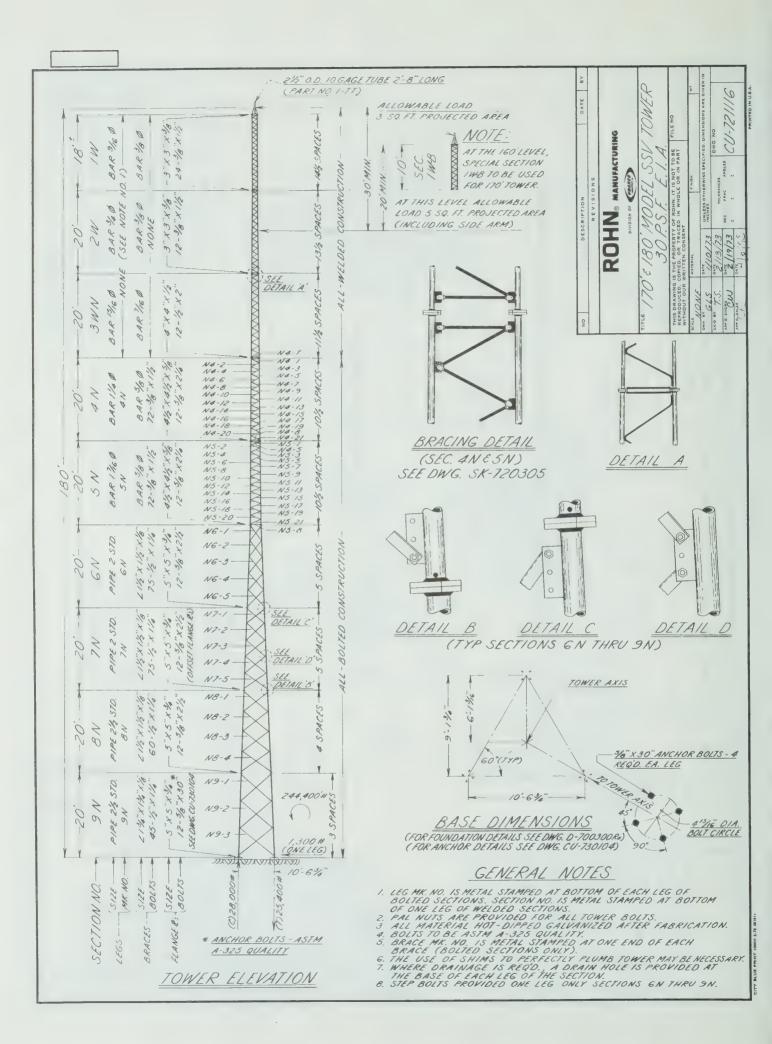


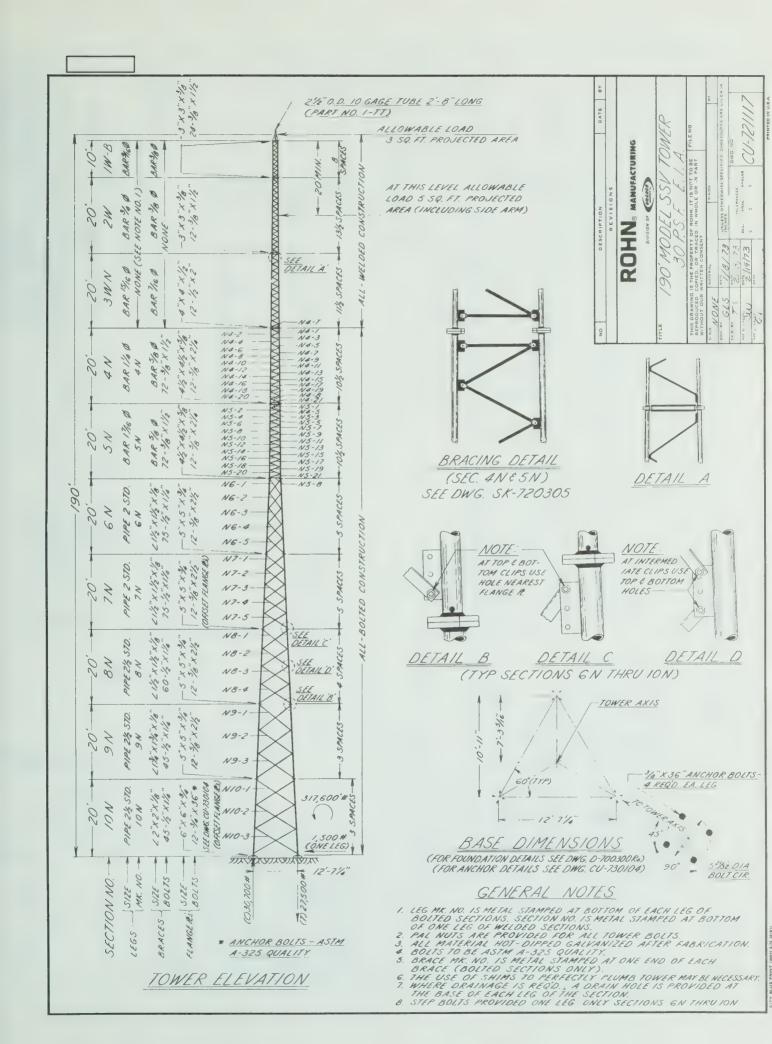
BASE DIMENSIONS (FOR FOUNDATION DETAILS SEE DWG. D-700300Ra) (FOR ANCHOR DETAILS SEE DWG. CU-730104)

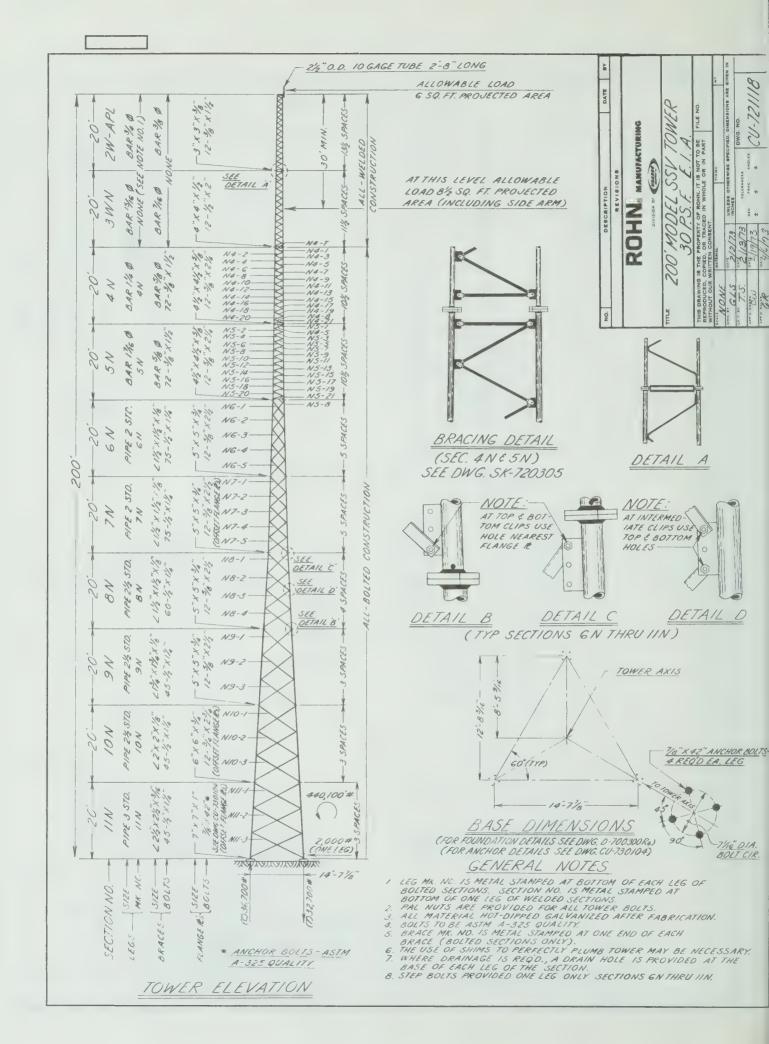












SELF-SUPPORTING TOWER

SSVN SERIES

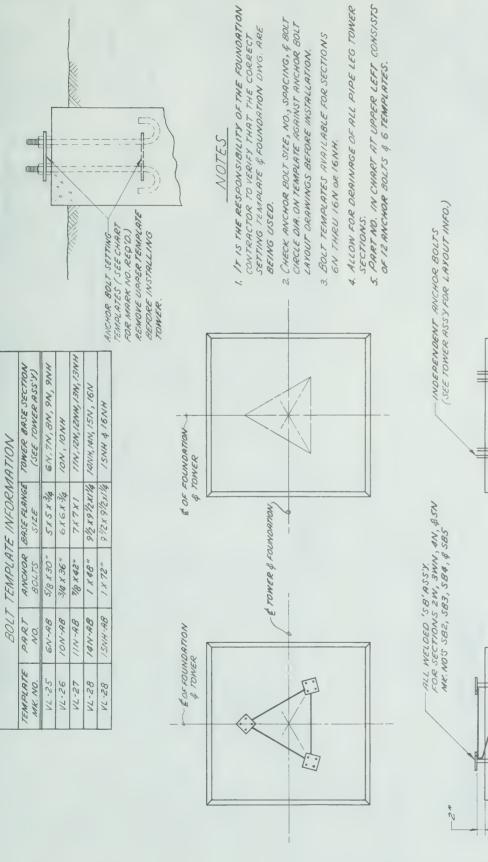
30 Lbs./Sq. Ft. Wind Load

										1 OWER	CK MC I	HE LGHI							
ITEM & PART NUMBER	. TW	30'	401	50	,09	10/	- 08	106	1001	110'	120	1301	140	150	160	170,	180	190	200
e e	18		_	_	-	-	_	_	_	_	_	_					-		
18' Welded Straight Section	116		-		-		,-	- 200-	_		_				_				
10' Welded Straight Section 1WB	65	_		_		-		-		_						_		_	
Beacon Plate APLIW2WA	26																		
Side Arm Bracket SAB2W	15																		
20' Welded Tapered Section 2W	160	_	-	-	-	-	-		-	_	_	_	_			_	_	_	_
20' Welded Tapered Section 3WN	230			_	-		_	_	_	-	_		_		_		_	-	
20' Knock Down Tapered Section 4N	435					_	_	_		-	_	_	_			_	1		
20' Knock Down Tapered Section 5N	540							-	,-	-	_	_	_			parents.		_	
20' Knock Down Tapered Section 6N	480									*	*	_	_		_		_	_	
20' Knock Down Tapered Section	545											*	*	_	_	_	-	_	
20' Knock Down Tapered Section 8N	700													*	*	-		_	_
20' Knock Down Tapered Section 9N	720															<u>*</u>	*	_	_
20' Knock Down Tapered Section	830										,							*	_
20' Knock Down Tapered Section	1410																		*
Base Grounding Kit BGKE	10	2	2	2	2.	2	2	2	2	က	33	က	3	3	က	9	σ	က	က
SB2	45	-																	
SB3	65			_	-														
SB4	80					-	-	,	,										
S85	105							-	_					,	-	,	,		
GNAB	20					1				-	-	-	-	-	-	-	-	-	
LOIVAB	080																	-	
Anti-Climb Warning Sign																			,
ACWS		-	-	-	-	-	-	-	-	-	-					-			
THOLER WETCHT		308	359	2,50	609	1008 1059	050	1573	1624	1994	2045	2539	2590	3239	3290	3959	4010	4819	6229

\*Base section of the tower should be designated as such.

See applicable drawings for foundation and loading details.





RE RE-DRAWN (REPLACES CU-730104R,) 2-14-75 OL REVISIONS

DATE BY

# ROHN. MANUFACTURING DIVISION OF COMMENCE

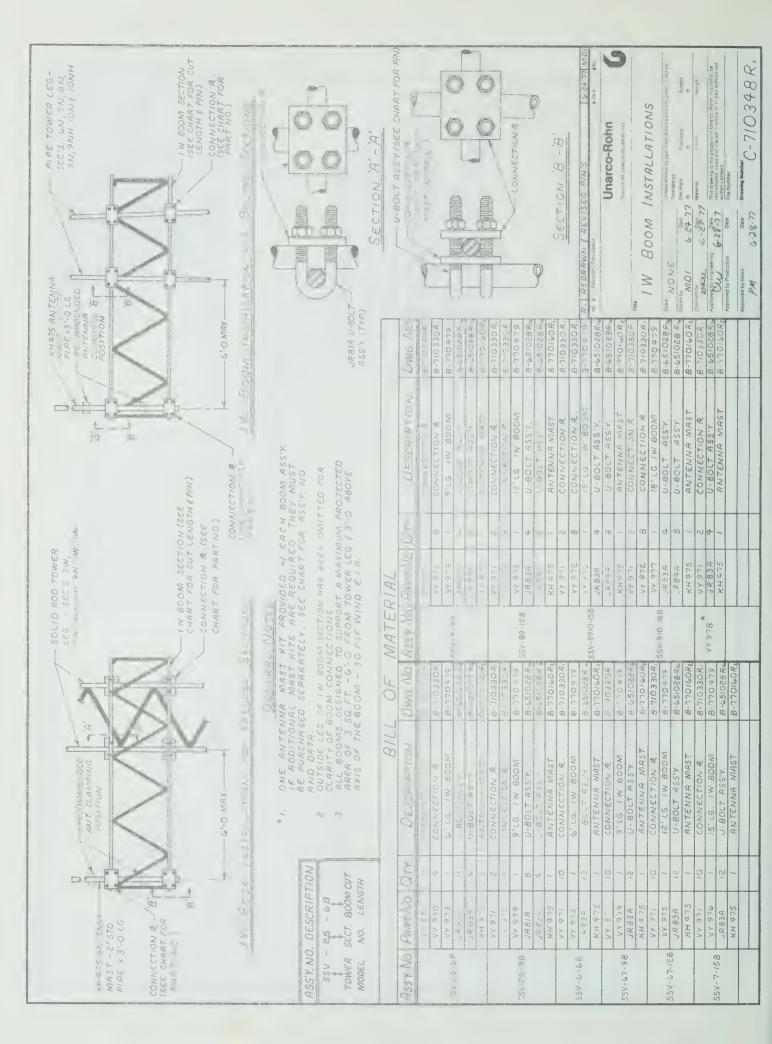
MEDRMATION & SHORT BASE DETAILS

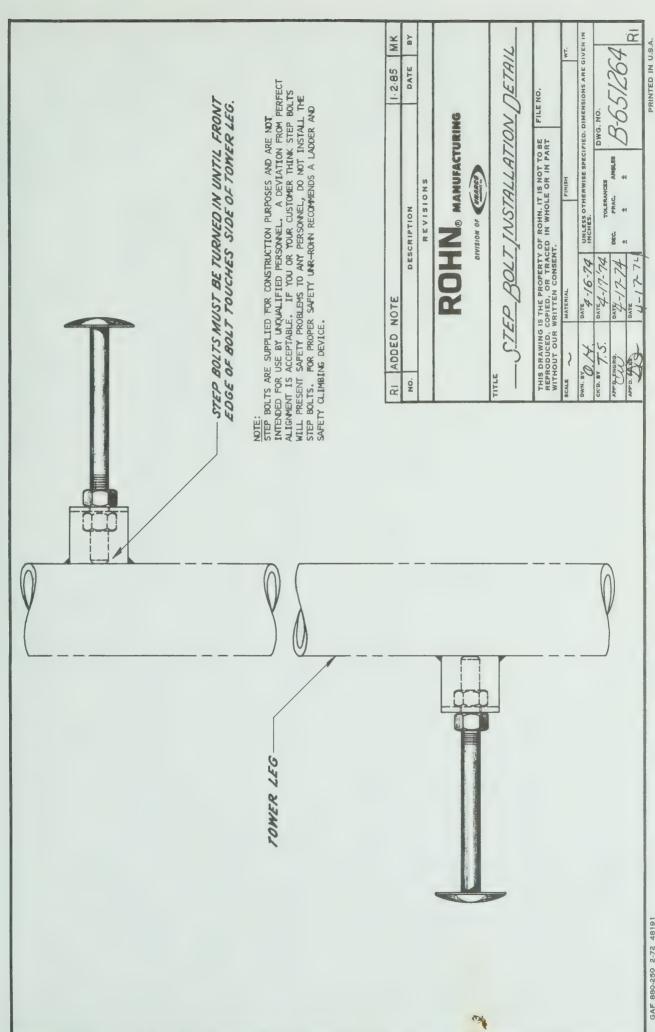
ST-1-FO AGE 19-17-5		
	DATE - 14-75 UNLESS CTHERWISE SPECIFIED DIMENSIONS ARE GLUTH IN	D DIMENSIONS ARE GIVEN
-	TO TO THANCES	DWG NO
57-1-75 B	DEC. FRAC. ANGLES	V1-72010AD

3 DIER & DAD FOUNDATIONS FOR SECTIONS THRU IEN ORIENH PAD FOUNDATION FOR SECTIONS IW-TN

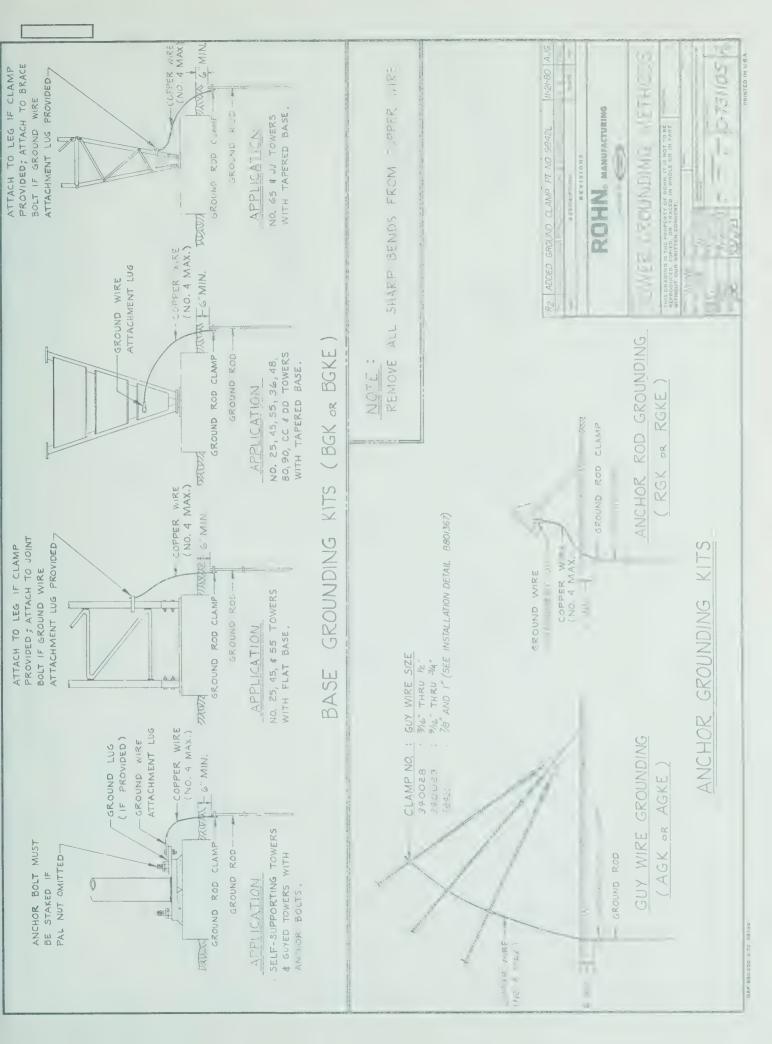
RINTED IN U.S.A.

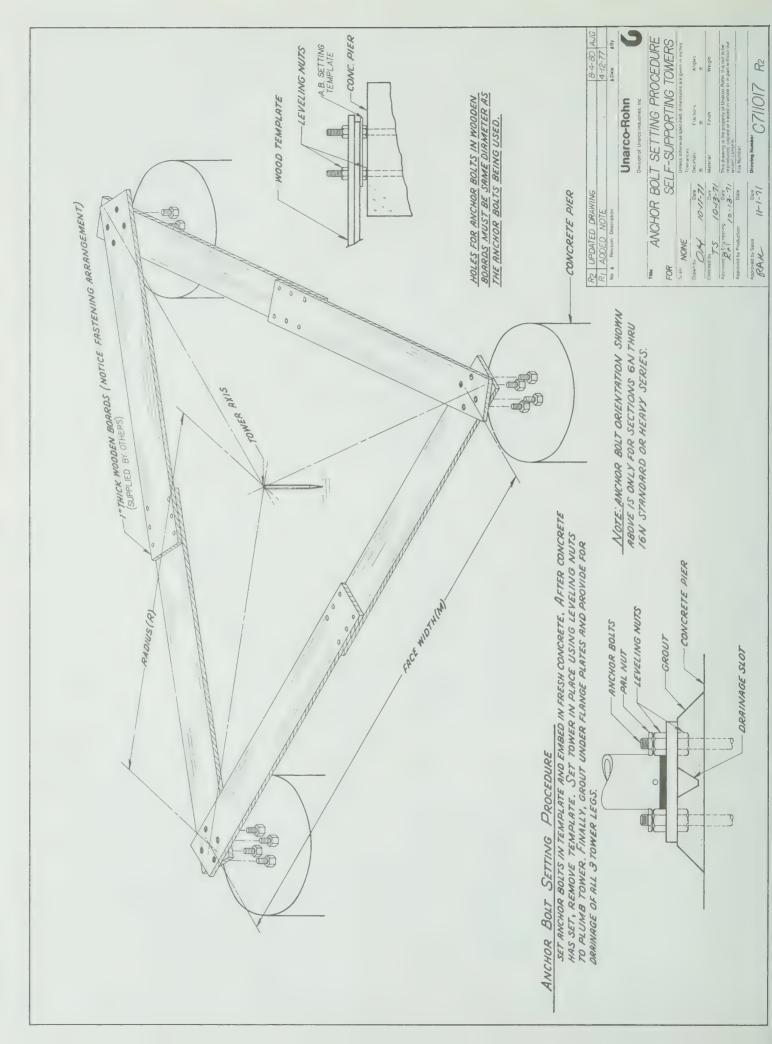
NOTE: SEE DWG. NO.8-140973 FOR TEMPLATE FABRICATION DETRILS.











Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

### All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

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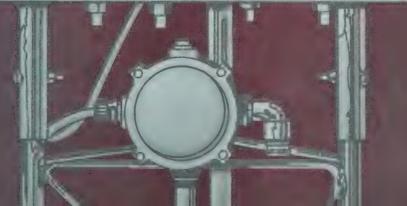
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# Rohn

lighting equipment





# quality design and construction for unsurpassed performance

Compare these features and you will find Rohn Lighting Equipment is your best buy:

- 300mm Beacons
- Obstruction lights
- Lighting controls & flashers
- Junction boxes designed and built to meet all FAA and FCC specifications

Complete kits available for towers up to 1050'. Special kits available upon request.

#### A. ROHN® BIR 300mm Code Beacon

Engineered to meet all FCC and FAA Beacon specifications, Rohn Beacons are furnished with red heat resistant lenses. The tough internal wiring is made of heavy insulated flexible cable. The Rohn Beacon is designed for continuous service under <u>all</u> weather conditions.

Mounting dimensions: 31" high x 123/4" diameter

Two 620w 120V 3000 hour mogul prefocused airway beacon lamps are required. Rohn part #B620W. (Ordered separately)

#### **ROHN® Lightning Rod**

LR - 7/8" x 6' aluminum rod LRC - copper clad steel - nickel tipped 5/8" x 5' lightning rod only

# obstruction lights

B. OB1 Single

Supplied with a 3/4" pipe side entrance tap, the OB1 is designed to facilitate installation on horizontal conduit stubs.

#### C. OB2 Double

Same as OB1 — except the OB2 has double lamps and bottom entrance fitting for installation on 3/4" vertical conduit.

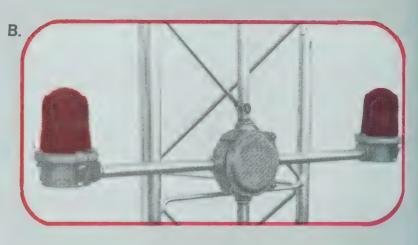
Both models use flanged Fresnel lenses, stainless steel latches and retainer cable, copper-free cast aluminum alloy housings. Lamps not included. (116 watt, 120V, 8000 hour lamps. Rohn P.N. OB116W).

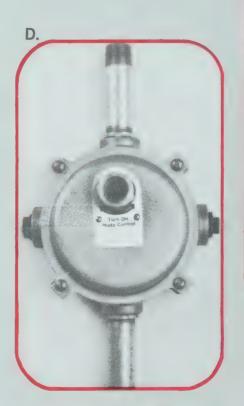
100 watt 230V lamps are available on special order for ICAO International Systems. Rohn P.N. OB100W. Life span of 230V lamps is approximately 1/2 that of the 120V lamp.

# **ROHN**<sub>®</sub> lighting controls

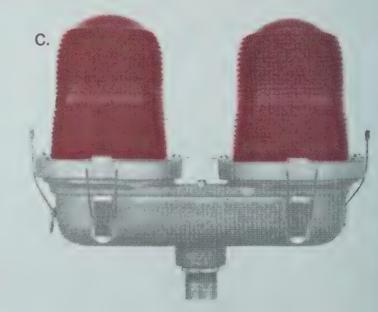
D. photoelectric control

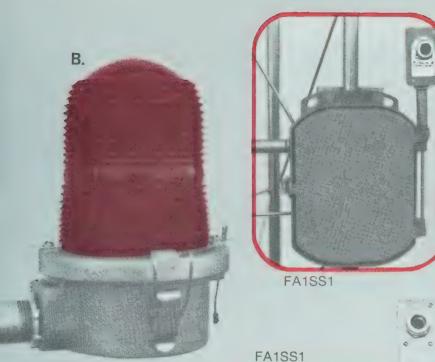
RPH1-120V. A light sensitive control to turn tower lights on automatically when sun light level drops. For use with type A1 or ICAO Lighting System, Load capacity is 500 watts at 120V.



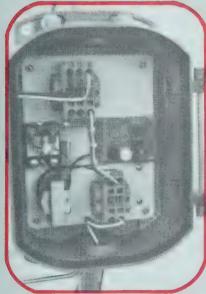




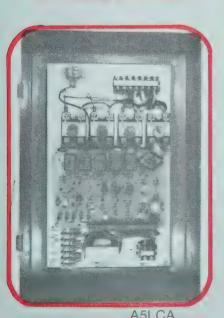


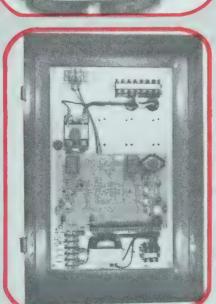












A1LCA

RPH2-230V. The same as RPH-1 except load capacity is 1000 watts at 230V.

# solid state lighting controls

Available in 120VAC or 230VAC operation. Pre-set for 26 plus or minus 3 flashes per minute. Controls are available in many configurations to meet FAA Advisory Circular 70/7460-1G dated 10-22-85. See control assembly part numbers and description on sheet D2336 for more information.

# quality features by ROHN

- 1. Flasher and photocell circuit are low voltage and completely isolated from the power line.
- 2. Light emitting diodes indicate proper operation of each section of circuitry.
- 3. Opto-isolated solid state power relays provide zero voltage switching, giving longer lamp life and reduced RFI.
- 4. Lightning Arrestor responds to unwanted and dangerous overloads.
- 5. Most components are available at local electronic distributors.
- 6. Interchangeable with models RC23, RC 231PC, LC23, A3RC, A3R1 and A3SS1 using the same mounting holes and outdoor box.

Flasher rate -26 + / -3FPM 2/3 on, 1/3 off Power input - 108-132 VAC

Flasher Output — 1500 Watts incandescent Sidelight Output - 1500 Watts incandescent Photocell Turn On — Adjustable

# Beacon flasher unit only

Models A3SSX1 and A5SSX1 are designed to flash the beacon only. Photocontrol or time switch is provided by the user.

# solid state alarm controls

A1LCA - For towers to 150'

A3LCA - For towers 151' - 350'

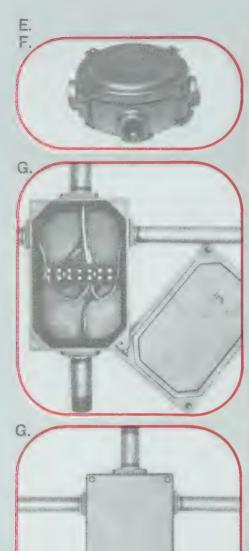
A5LCA - For towers 351' - 700'

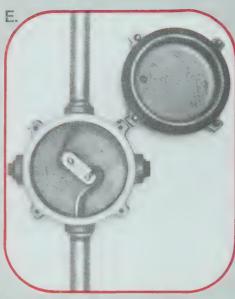
The Rohn Tower Light Control and Alarm System utilizes the latest state of the art electronics to provide extremely reliable control of tower lights, with "fail safe" alarming of all functions.

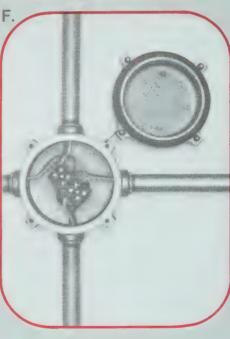
Use of solid state electronics greatly increases reliability over mechanical devices and thermal rays.

# ROHN quality features

- 1. Adjustable automatic turn on and off as required by the FAA and FCC.
- 2. Flashing rate of approximately 30 per minute, with "on time" twice that of "off time."
- 3. Indications provided by alarm circuitry:
  - Lights on
  - Failure of one or more beacons or side
  - Beacon flasher failure. (automatic turn on to continuous burn if failure occurs)
  - •Power failure to unit
- 4. Visual indicators and test switches allow testing of functions without outside equipment.
- 5. All controls are 120VAC, single phase.







# ROHN. Junction boxes

Rohn Junction Boxes are weathertight, copper-free cast aluminum boxes. Each box is furnished with a cover, neoprene sealing gasket, stainless steel safety cable and self-retaining cover screws. Each box comes with 4 or 7 contact pressure type terminal blocks, as required.

# E. JB4C

Wire support for vertical run. The wire support employs a "change of direction" principle for full support.

# F. JB4TC

Wire terminal and support for vertical and horizontal run.

# **JB4 Series Specifications**

Approximate inside dimensions — 5" diameter X 2" depth. Four position terminal block, 3 4" pipe thread hub, 4 directions.

# G. JB7TC

Box, terminal and cable support.

# **JB7TC Specifications**

Approximate inside dimensions — 5" X 8" X 2" deep. Seven position terminal block, hub tap 1" vertical and 3-4" horizontal pipe threads.

# ROHN

6718 W. Plank Road P.O. Box 2000 Peoria, IL 61656 TWX: 910-652-0646 FAX: 309-697-5612 PHONE: 309-697-4400 U.S.A.

# OBSTRUCTION LIGHTING COMPONENTS

B1	300 MM beacon with red filter screens - no bulbs	8
BlR	300 MM beacon with red glass - no bulbs	7
OB1	Single obstruction light (red), 3/4" side entrance - no bulbs	
OB2	Double obstruction light (red), 3/4" bottom entrance - no bulbs	
RPH1	Photo control only, in outdoor housing (120 volt)	
RPH2	Photo control only, in outdoor housing (230 volt)	
FA1SS1	Solid-state lighting control with 1 circuit flasher and photo control	2
73.1000	in outdoor housing (120 volt)	
FA1SS2 FA1SS3	Solid-state lighting control panel only (120 volt)  Solid-state lighting control less flasher housing (120 volt)	
FA1SS4	Solid-state lighting control less photocell (120 volt)	1
A3SSX1	Solid-state lighting control 1 circuit flasher only in outdoor housing (120 volt)	1
A3SSX2	Solid-state lighting control panel only for 1 circuit flasher (120 volt)	-
FA1SS5	Solid-state lighting control with 1 circuit flasher and photo control	2
	in outdoor housing (230 volt)	
FA1SS6	Solid-state lighting control panel only (230 volt)	
FA1SS7	Solid state lighting control less flasher housing (230 volt)	1
FA1SS8	Solid-state lighting control less photocell (230 volt)	]
A3SSX5	Solid-state lighting control 1 circuit flasher only in outdoor housing (230 volt)	1
A3SSX6	Solid-state lighting control panel only for 1 circuit flasher (230 volt)	
FA2SS1	Solid-state lighting control with 2 circuit alternating flasher and photo	2
FA2SS2	control in outdoor housing (120 volt)  Solid-state lighting control panel only (120 volt)	
FA2SS3	Solid-state lighting control less flasher housing (120 volt)	1
FA2SS4	Solid-state lighting control less photocell (120 volt)	1
A5SSX9	Solid-state lighting control 2 circuit alternating flasher only in outdoor	1
	housing (120 volt)	
FA2SS5	Solid-state lighting control with 2 circuit alternating flasher and photo	2
	control in outdoor housing (230 volt)	
FA2SS6	Solid-state lighting control panel only (230 volt)	
FA2SS7	Solid-state lighting control less flasher housing (230 volt)	1
FA2SS8	Solid-state lighting control less photocell (230 volt)	1
FA2SS9	Solid-state lighting control with 2 circuit synchronizing flasher and photo control in outdoor housing (120 volt)	2
FA2SS10	Solid-state lighting control with 2 circuit synchronizing flasher and photo	2
11110010	control in outdoor housing (230 volt)	_
A5SSX1	Solid-state lighting control 2 circuit synchronizing flasher only in outdoor	1
	housing (120 volt)	
A5SSX2	Solid-state lighting control panel only for 2 circuit synchronizing flasher	
	(120 volt)	
A5SSX5	Solid-state lighting control 2 circuit synchronizing flasher only in outdoor	1
	housing (230 volt)	
A5SSX6	Solid-state lighting control panel only for 2 circuit synchronizing flasher	
11101	(230 volt)	
AllCA	Alarm and photo control unit in indoor housing	2
A3LCA	Alarm, 1 circuit flasher, and photo control in indoor housing	2
A5LCA LBRR1200	Alarm, 2 circuit flasher, and photo control in indoor housing  Load balance resistor, outdoor/indoor housing (1200 watts)	
LBRRKIT	Load balance resistor (same as above) with wire, conduit, reducer, and	
DDI(I(KL 2	locknuts to connect tower lighting kit to radio equipment building	
CB1	Conduit breather, 3/4" tap	1/
JB4C	JB4 junction box with cable support, 3/4" tap	
JB4TC	JB4 junction box with 4 contact terminal blocks and cable support, 3/4" tap	
JB7TC	JB7 junction box with 7 contact terminal blocks and cable support, 1" vertical	
	tap, 3/4" horizontal tap	
B620W	Beacon bulb (3000 hour) - 120 volt (available in case of 24 bulbs)	
OB116W	Obstruction light bulb (8000 hour) - 120 volt (available in case of 120 bulbs)	
B600W	Beacon bulb (1000 hour) - 230 volt (available in case of 24 bulbs)	
OB100W	Obstruction light bulb (2000 hour) - 230 volt (available in case of 120 bulbs)  Can of 100' x 1/2" stainless steel wraplock with buckles, keys, and ratchet	
WR100	wrench	
LRB1	Lightning rod assembly, 7/8" x 6' solid aluminum, with base for 300 MM beacon	
LR	Lightning rod only, 7/8" x 6' solid aluminum, with nut (Rohn beacon mounting	
	plates drilled to fit this rod)	
LRC	Lightning rod only, 5/8" x 5' solid copper, nickeled tip, with nuts (Rohn	
	beacon mounting plates drilled to fit this rod)	
A3SS1	DIS-	
A3SS5	CON-	
A5SS1	TIN-	
A5SS5	U E D	

<sup>\*</sup>Discontinued. Not available as a complete unit. Replacement parts available on special request.

Refer to alphabetical/numerical price list for current prices.

<sup>\*\*</sup>A LBRR1200 is required with FA2SS1 control where constant line loading is required (on single beacon tower).

# TOWER OBSTRUCTION LIGHTING KITS

	STANDARD KIT	230V, 50/60 CYCLE	*SELF-SUPPORTING CONVERSION
TOWER HEIGHT	PART NUMBER	KIT PART NUMBER	KIT PART NUMBER
EXPOSED WIRE			
to 150'	RA1E	RAIEE	
151' to 350'	FAlE	FAlee	**FAKIT (1 req'd.)
CONDUIT			
to 150'	RA1C	RAICE	
151' to 350'	FA1C	FA1CE	**FAKIT (1 req'd.)
351' to 500'	FA2C1	FA2C1E	**FAKIT (2 req'd.)
501' to 700'	FA2C2	FA2C2E	
701' to 1050'	FA3C		400 MIN AND AND
ALARM			
to 150'	RAICM		mails delly ents
151' to 350'	FA1CM		**FAKIT (1 req'd.)
351' to 500'	FA2C1M		**FAKIT (2 req'd.)
501' to 700'	FA2C2M	may state	

All kits include photo control, necessary wire, fittings, junction boxes, lights, spare bulbs, and flasher (where required) in outdoor housing, except alarm kits. Alarm kits include indoor control with remote photocell. See drawings and parts lists for details.

- NOTES: 1) Above kits are per FAA Advisory Circular 70/7460-1G, dated 10/22/85.
  - 2) Prices are available on request for special kits for towers over 1050', High and Medium Intensity Strobe Lighting Kits, and I.C.A.O. Lighting Kits.
  - 3) Lamp life on 230 volt kits is very short.

# Refer to alphabetical/numerical price list for current prices.

<sup>\*</sup>In addition to a standard kit, order a conversion kit for each OB light level where tower face width is more than 7'. The material in the conversion kit is sufficient to run from inside corner ladder to face. (See \*\* below.)

<sup>\*\*</sup>Conversion kit part number is determined by face width at OB light level rounded up to the nearest 5'. (For example, if tower face width is 13' 4" at OB light level, order part number FAKIT15.)

# (Replaces D-2240)

# REPLACEMENT PARTS FOR OBSTRUCTION LIGHTING

### PART NUMBER

# OB1 & OB2 OBSTRUCTION LIGHTS (Drawing No. C620701/C621306)

530230 OB red lens (AP35222R)

OBG1 Gasket

OBR OB retainer ring

OBL OB latch

50714 OB bulb receptacle

# Bl BEACON\* (Drawing No. D770040)

711130	Red filter screens (AP3524) - 2 required per beacon
547870	Upper beacon lens, clear
547770	Center beacon lens, clear
547020	Lower beacon lens, clear - 2 required per beacon
BGS	Set of 9 beacon gaskets
BGT1	Gasket (1 per beacon)
BGT2	Gasket (3 per beacon)
BGM1	Gasket (1 per beacon)
BGB1	Gasket (4 per beacon)
ZR1	Upper "Z" ring (between 547870 & 547770)
ZR2	Lower "Z" ring (between 547020 & 547020)
23X546	Beacon bulb receptacle
WBS	Beacon high temperature wiring (inside) - complete set

# BlR BEACON (Drawing No. D770040)

4	AP3557	Upper beacon lens, red
į	AP3556	Center beacon lens, red
Ž	AP3555	Lower beacon lens, red - 2 required per beacon
]	BGSR	Set of 5 beacon gaskets
1	BGT1	Gasket (1 per beacon)
]	BGT2	Gasket (1 per beacon)
]	BGM1	Gasket (1 per beacon)
]	BGB1	Gasket (2 per beacon)
	23X546	Beacon bulb receptacle
I	WBS	Beacon high temperature wiring (inside) - complete set

# MISCELLANEOUS

2237	Water tight connector for 2 conductor (2/#12) - UF	cable
2534	Water tight connector for 2/#14 SO	
2535	Water tight connector for 3 conductor (1/#6, 1/#8,	1/#12)

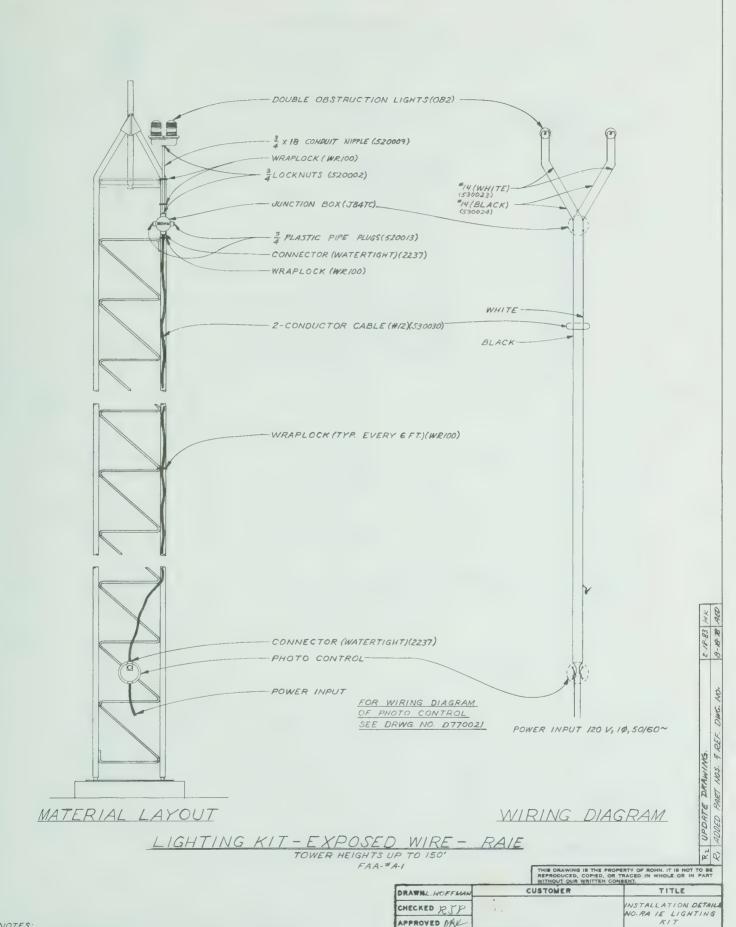
Note: Replacement castings for Bl and BlR beacons are available upon request.

\*Discontinued. Not available as a complete unit.

# Refer to alphabetical/numerical price list for current prices.

F.O.B. PEORIA, ILLINOIS. SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.





DATE APR. 3, 1962

SCALE NONE

DRAWING NO.

620403R

MANUFACTURING

NOTES:

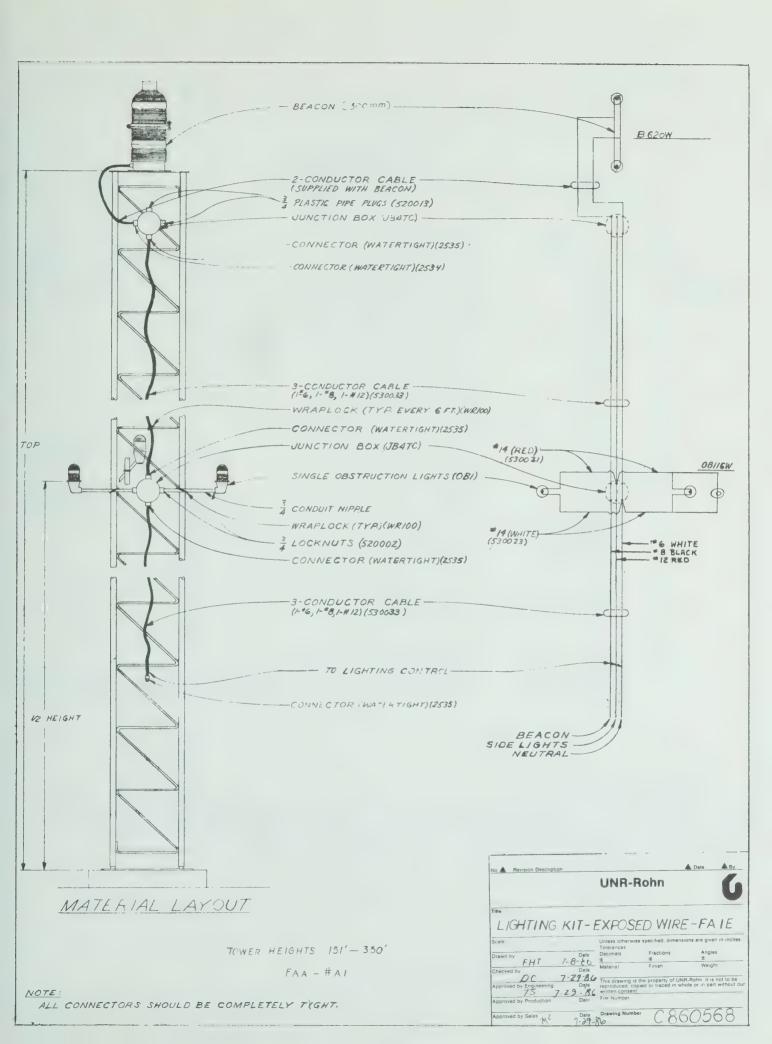
ALL CONNECTORS SHOULD BE COMPLETELY TIGHT. PHOTO CONTROL SHOULD FACE NORTHERN SKY.

# RALE LIGHTING KIT

# To 150' w/exposed wire 120 volt AC

Qty.	Part Number	Description
1	OB2	Double obstruction light
2	OB116W	Obstruction light bulbs (120 volt)
1	JB4TC	Junction box
2	2237	Water tight connectors
1	520009	Conduit nipple 3/4" x 18"
2	520013	Plastic pipe plugs 3/4"
2	520002	Conduit lock nuts 3/4"
1	WR100	Can stainless steel wraplock (1/2" x 100")
1	520023	Can joint compound
1	RPHl	Photo-electric control (120 volt)
10'	530024	#14 wire (black)
10'	530023	#14 wire (white)
-	530030	<pre>2 conductor #12 cable (tower height plus 5')</pre>
1	OBLITECAT	Obstruction lighting catalog

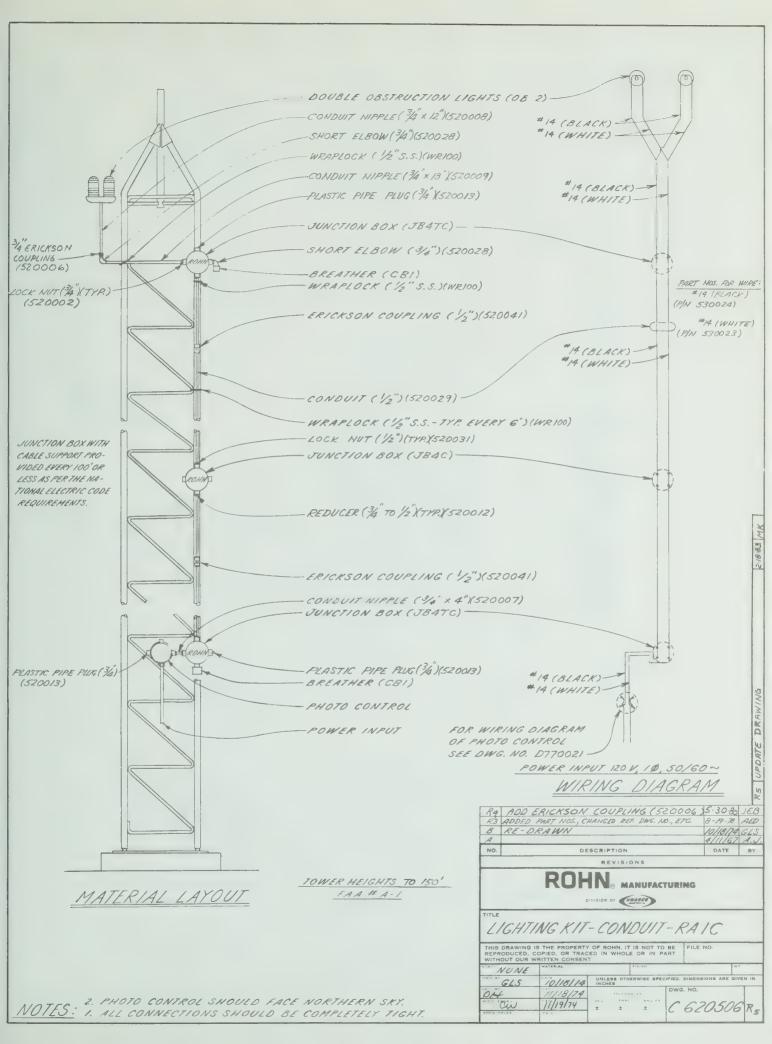
For guyed or self-supporting tower.



# FALE LIGHTING KIT

151' to 350' w/exposed wire 120 volt AC

Qty.	Part Number	Description
3	OBl	Single obstruction lights
2	JB4TC	Junction boxes
2	520006	Erickson couplings 3/4"
2	520013	Plastic pipe plugs 3/4"
1	TB27A	TB condulet, cover, and gasket 3/4"
4	520002	Conduit lock nuts 3/4"
8	520062	Pipe couplings 3/4"
1	2534	Water tight connector
4	2535	Water tight connectors
1	WR100	Can stainless steel wraplock (1/2" x 100")
1	520023	Can joint compound
	530021	#14 wire (red)
25 '	530023	#14 wire (white)
	520007	Conduit nipple 3/4" x 4"
	520009	Conduit nipples 3/4" x 18"
	520010	Conduit nipples 3/4" x 24"
	KH1665	Nipple 3/4" x 18" with 30° bend
1	OBLITECAT	Obstruction lighting catalog
1	FALSSI	Flasher box w/flasher, remote photocell, and hardware
4	520008	Conduit nipples 3/4" x 12"
1	BlR	Beacon w/red glass
4	B620W	Beacon bulbs (120 volt)
6	OB116W	Obstruction light bulbs (120 volt)
-	530033	3 conductor #6, #8, #12 cable (tower height plus 10')

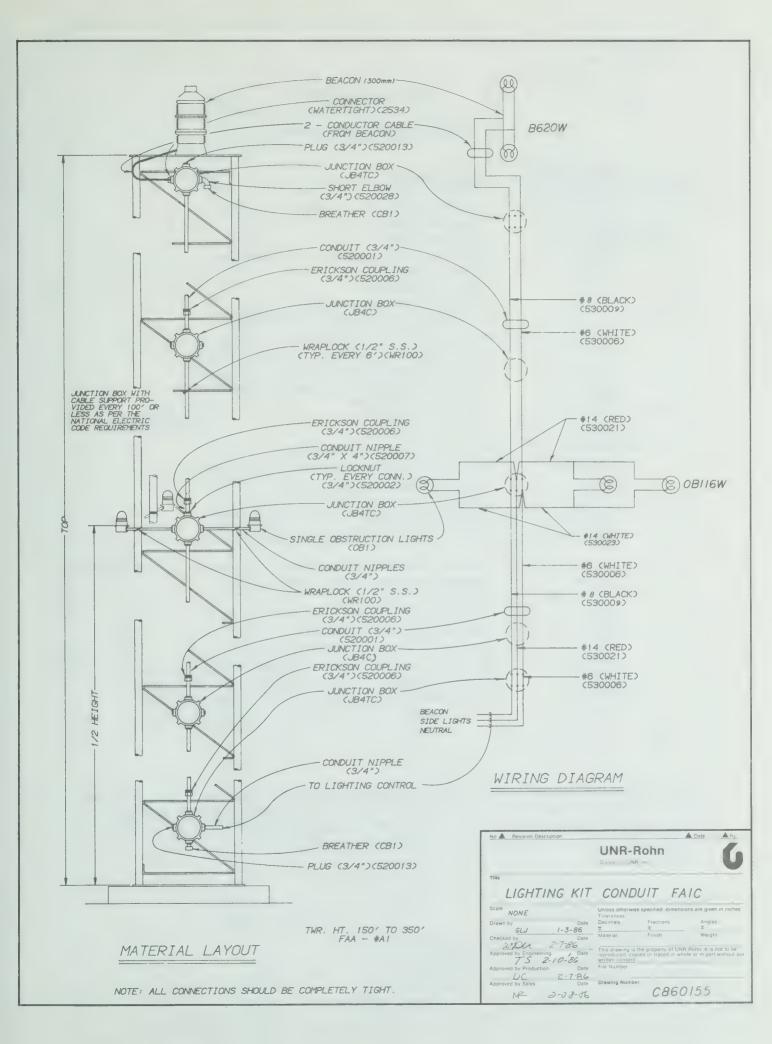


# RAIC LIGHTING KIT

To 150' w/conduit 120 volt AC

Qty.	Part Number	Description
1 4 2 1 2 2 1 2 2 2 8 4	OB2 OB116W JB4TC JB4C 520028 CB1 520006 520041	Double obstruction light Obstruction light bulbs (120 volt) Junction boxes Junction box Short elbows 3/4" Conduit breathers Erickson coupling 3/4" Erickson couplings 1/2"
	520013 520002 520031	Plastic pipe plugs 3/4" Conduit lock nuts 3/4" Conduit lock nuts 1/2"
4 1 1	520012 WR100 520023 RPH1	Reducers 3/4" to 1/2" Can stainless steep wraplock (1/2" x 100') Can joint compound Photo-electric control (120 volt)
; 1 1	520007 520008 520009	Conduit nipple 3/4" x 4" Conduit nipple 3/4" x 12" Conduit nipple 3/4" x 18"
- - 1	530024 530023 520029 OBLITECAT	#14 wire (black) (tower height plus 15') #14 wire (white) (tower height plus 15') Rigid galvanized conduit 1/2" (tower height) Obstruction lighting catalog

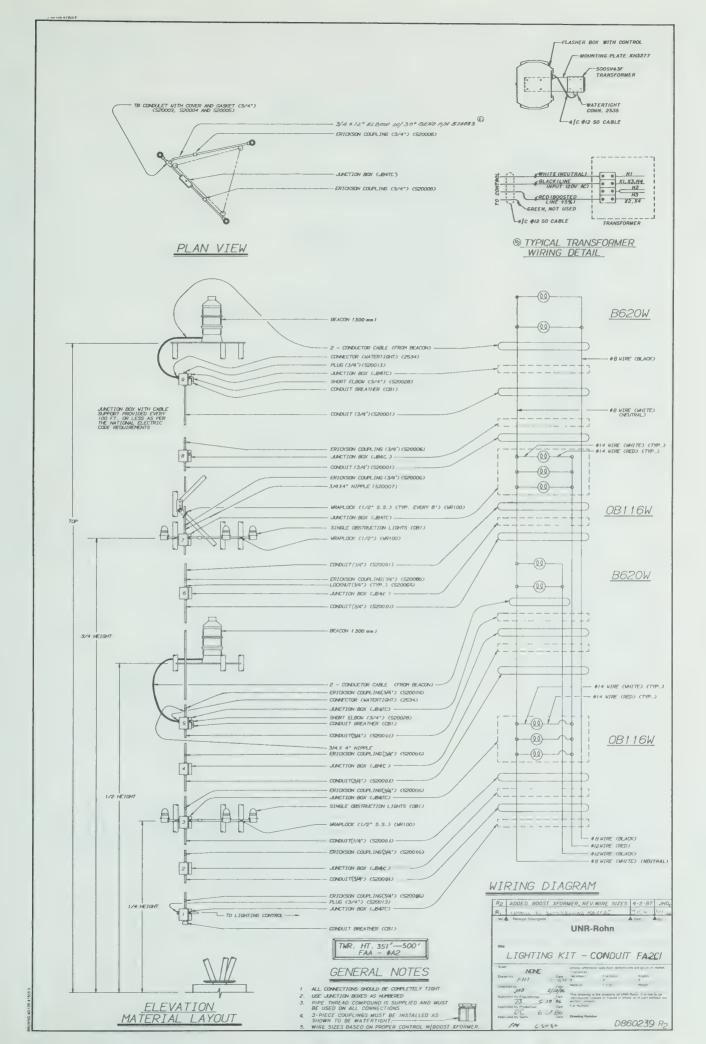
For guyed or self-supporting tower.



# FAIC LIGHTING KIT

151' to 350' w/conduit 120 volt AC

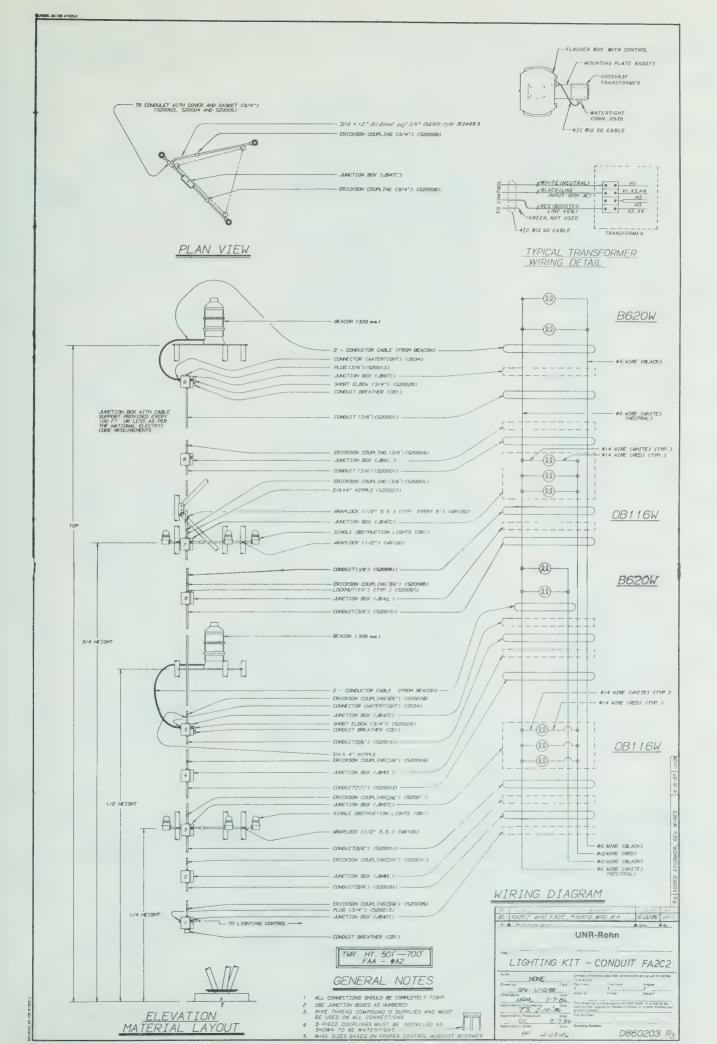
Oty.	Part Number	Description
3	OBl	Single obstruction lights
3	JB4TC	Junction boxes
2	JB4C	Junction boxes
1	2534	Water tight connector
1	520028	Short elbow 3/4"
2	CBl	Conduit breathers
6	520006	Erickson couplings 3/4"
8	520062	Pipe couplings 3/4"
2	520013	Plastic pipe plugs 3/4"
1	TB27A	TB condulet, gasket, and cover 3/4"
17	520002	Conduit lock nuts 3/4"
1	WR100	Can stainless steel wraplock (1/2" x 100')
1	520023	Can joint compound
25 '	530021	#14 wire (red)
25 '	530023	#14 wire (white)
2	520007	Conduit nipple 3/4" x 4"
emo	530021	#14 wire (red) (1/2 tower height plus 15')
5	520009	Conduit nipples 3/4" x 18"
4	520010	Conduit nipples 3/4" x 24"
1	KH1665	Nipples 3/4" x 18" with 30° bend
1	OBLITECAT	Obstruction lighting catalog
1	FA1SS1	Flasher box w/flasher, remote photocell, and hardware
5	520008	Conduit nipples 3/4" x 12"
1	BlR	Beacon w/red glass
4	B620W	Beacon bulbs (120 volt)
4	OB116W	Obstruction light bulbs (120 volt)
_	530006	#6 wire (white) (tower height plus 15')
_	530009	#8 wire (black) (tower height plus 15')
_	520001	Rigid galvanized conduit 3/4" (tower height)



# FA2C1 LIGHTING KIT

351' to 500' w/conduit 120 volt AC

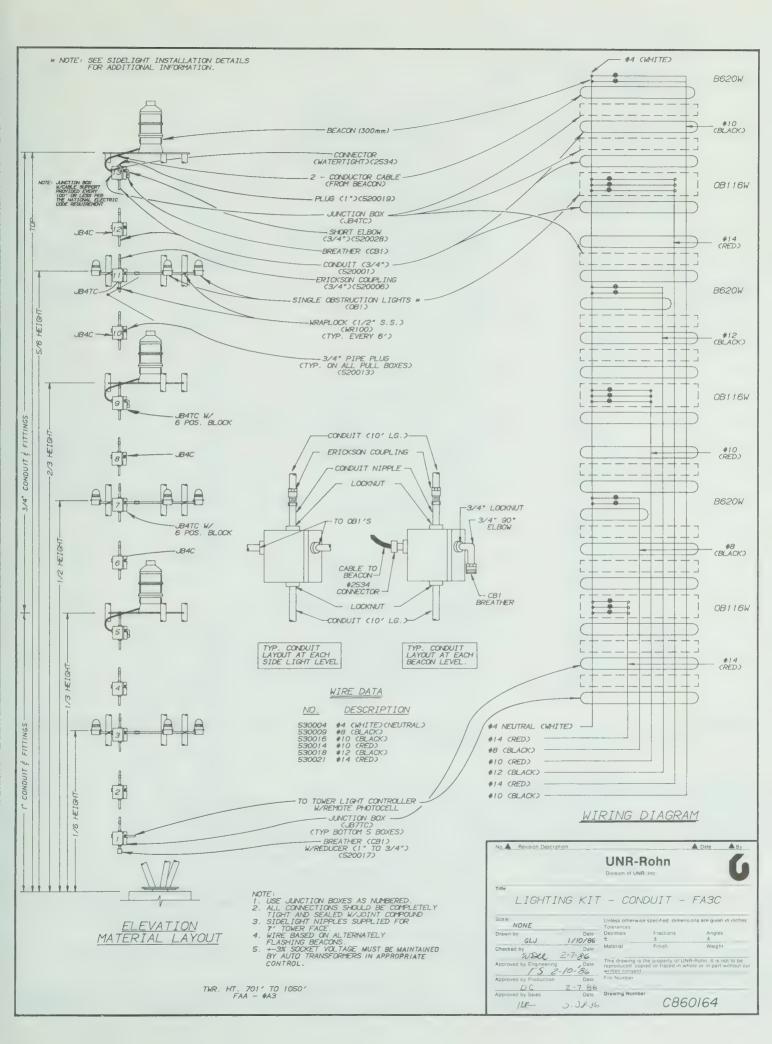
Qty.	Part Number	Description
6	OBl	Single obstruction lights
4	JB4C	Junction box
5	JB4TC	Junction boxes
2	2534	Water tight connectors
2	520028	Short elbows 3/4"
3	CBl	Conduit breathers
12	520006	Erickson couplings 3/4"
2	520013	Plastic pipe plugs 3/4"
2	TB27A	TB condulets, covers, and gaskets 3/4"
38	520002	Conduit lock nuts 3/4"
2	WR100	Cans stainless steel wraplock (1/2" x 100')
2	520023	Cans joint compound
50 1	530021	#14 wire (red)
501	530023	#14 wire (white)
5	520007	Conduit nipples 3/4" x 4"
9	520008	Conduit nipples 3/4" x 12"
9	520009	Conduit nipples 3/4" x 18"
8	520010	Conduit nipples 3/4" x 24"
18	520062	Pipe couplers 3/4"
2	520083	Nipples 3/4" x 12" with 30° bend
1	OBLITECAT	Obstruction lighting catalog
1	FA2SS1	Flasher box w/flasher, remote photocell, hardware, and boost transformer
2	BlR	Beacons w/red glass
8	B620W	Beacon bulbs (120 volt)
12	OB116W	Obstruction light bulbs (120 volt)
-	530012	#8 wire (white) (tower height plus 40')
***	530009	#8 wire (black) (tower height plus 40')
_	530017	#12 wire (red) (3/4 tower height plus 30')
-	530018	#12 wire (black) (1/2 tower height plus 20')
_	520001	Rigid galvanized conduit 3/4" (tower height)



# FA2C2 LIGHTING KIT

501' to 700' w/conduit 120 volt AC

Qty.	Part Number	Description
6	OB1	Single obstruction lights
4	JB4C	Junction boxes
5	JB4TC	Junction boxes
2	2534	Water tight connectors
2	520028	Short elbows 3/4"
3	CBl	Conduit breathers
12	520006	Erickson couplings 3/4"
2	520013	Plastic pipe plugs 3/4"
2	TB27A	TB condulets, covers, and gaskets 3/4"
38	520002	Conduit lock nuts 3/4"
2	WR100	Cans stainless steel wraplock (1/2" x 100')
2	520023	Cans joint compound
50'	530021	#14 wire (red)
50'	530023	#14 wire (white)
5	520007	Conduit nipples 3/4" x 4"
9	520008	Conduit nipples 3/4" x 12"
9	520009	Conduit nipples 3/4" x 18"
8	520010	Conduit nipples 3/4" x 24"
18	520062	Pipe couplers 3/4"
2	520083	Nipples 3/4" x 12" with 30° bend
1	OBLITECAT	Obstruction lighting catalog
1 ′	FA2SS1	Flasher box w/flasher, remote photocell, hardware, and boost transformer
2	BlR	Beacons w/red glass
8	B620W	Beacon bulbs (120 volt)
12	OB116W	Obstruction light bulbs (120 volt)
_	530006	#6 wire (white) (tower height plus 40')
_	530005	#6 wire (black) (tower height plus 40°)
-	530016	#10 wire (black) (1/2 tower height plus 20')
-	530017	#12 wire (red) (3/4 tower height plus 30')
-	520001	Rigid galvanized conduit 3/4" (tower height)

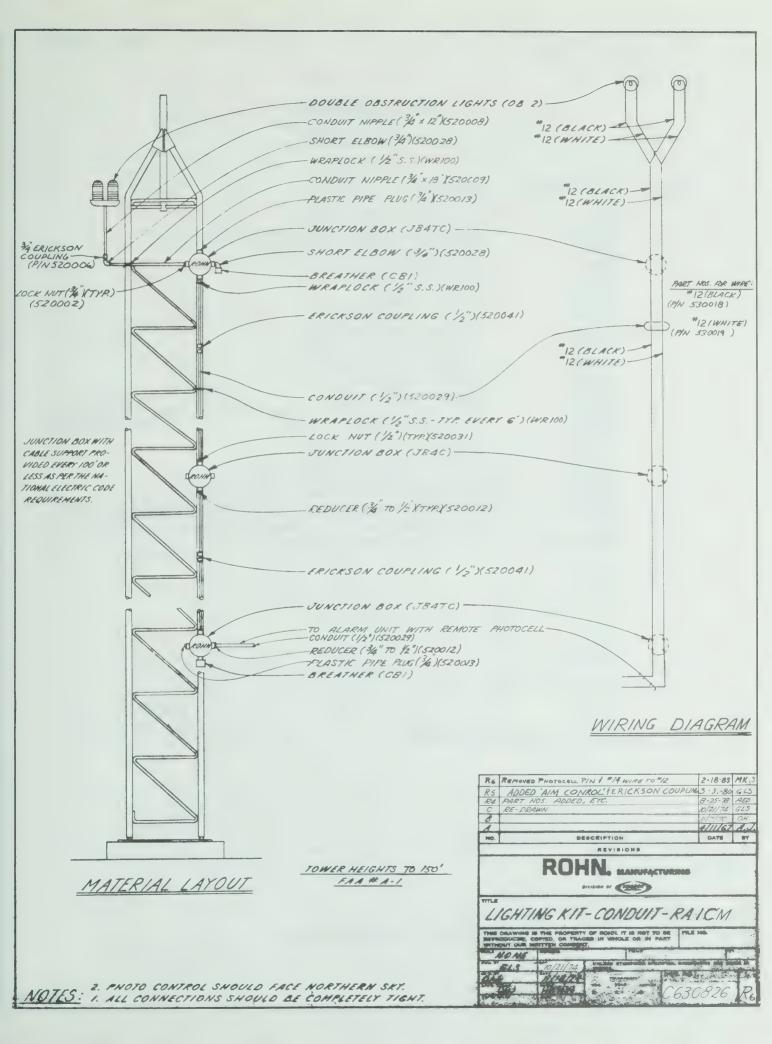


# FA3C LIGHTING KIT

701' to 1050' w/conduit 120 volt AC

Qty.	Part Number	Description
9	OB1	Single obstruction lights
4	JB4C	Junction boxes
7	JB4TC	Junction boxes
5	JB7TC	Junction boxes
9	2534	Water tight connectors
3	520028	Short elbows 3/4"
4	CBl	Conduit breathers
14	520006	Erickson couplings 3/4"
4	520016	Erickson couplings 1"
7	520013	Plastic pipe plugs 3/4"
1	520019	Plastic pipe plugs 1"
3	TB27A	TB condulets, covers, and gaskets 3/4"
1	LB37A	TB condulet, cover, and gasket 1"
2	520017	Reducer 1" to 3/4"
49	520002	Conduit lock nuts 3/4"
8	520015	Conduit lock nuts 1"
4	WR100	Cans stainless steel wraplock (1/2" x 100')
4	520023	Cans joint compound
60'	530021	#14 wire (red)
60'	530023	#14 wire (white)
8	520007	Conduit nipples 3/4" x 4"
12	520008	Conduit nipples 3/4" x 12"
12	520009	Conduit nipples 3/4" x 18"
12	520010	Conduit nipples 3/4" x 24"
24	520062	Pipe couplers 3/4"
2	510003	Terminal blocks
3	KH1665	Nipples 3/4" x 18" with 30° bend
3	KH1527	Cable, 14-2 solid, 10' long
1	OBLITECAT	Obstruction lighting catalog
1	FA3SS1XFM	Flasher box w/flasher, remote photocell, and transformers
1	1X4NIP	Conduit nipple 1" x 4"
3	BlR	Beacons w/red glass
12	B620W	Beacon bulbs (120 volt)
18	OB116W	Obstruction light bulbs (120 volt)
	530004	#4 wire (white) (tower height plus 70')
	530009	#8 wire (black) (1/3 tower height plus 40')
-	530014	#10 wire (red) (1/2 tower •height plus 50')
-	530016	#10 wire (black) (tower height plus 70')
-	530018	#12 wire (black) (2/3 tower height plus 60')
-	530021	#14 wire (red) (5/6 and 1/6 tower height plus 120')
PHO	520014	Rigid galvanized conduit 1" (1/3 tower height plus 20')
-	520001	Rigid galvanized conduit 3/4" (2/3 tower height)
10'	520029	Rigid galvanized conduit 1/2" (for remote photocell)

See Drawing No. C860164 for installation data.

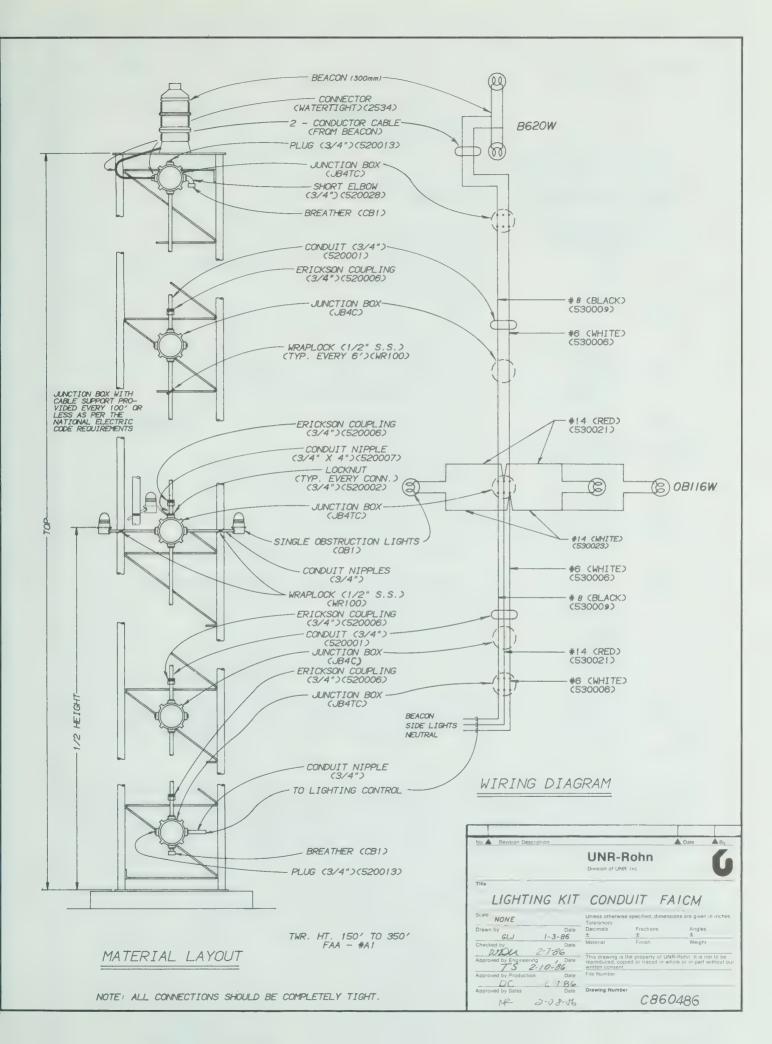


# RAICM LIGHTING KIT

To 150' w/conduit

Qty.	Part Number	Description
1	OB2	Double obstruction light
4	OB116W	Obstruction light bulbs (120 volt)
2	JB4T C	Junction boxes
1	JB4C	Junction box
1 2 2	520028	Short elbows 3/4"
2	CB1	Conduit breathers
1	520006	Erickson coupling 3/4"
2 2 8 6 5	520041	Erickson couplings 1/2"
2	520013	Plastic pipe plugs 3/4"
8	520002	Conduit lock nuts 3/4"
6	520031	Conduit lock nuts 1/2"
5	520012	Reducers 3/4" to 1/2"
1	WR 100	Can stainless steel wraplock (1/2" x 100')
1	520023	Can joint compound
7	520008	Conduit nipple 3/4" x 12"
1	520009	Conduit nipple 3/4" x 18"
-	530018	#12 wire (black) (tower height plus 30')
-	530019	#12 wire (white) (tower height plus 30')
-	520029	Rigid galvanized conduit 1/2" (tower height plus 20')
1	A 1MG	Indoor alarm control w/remote photocell
1	OBLITECAT	Obstruction lighting catalog

For guyed or self-supporting tower.



# FA1CM LIGHTING KIT

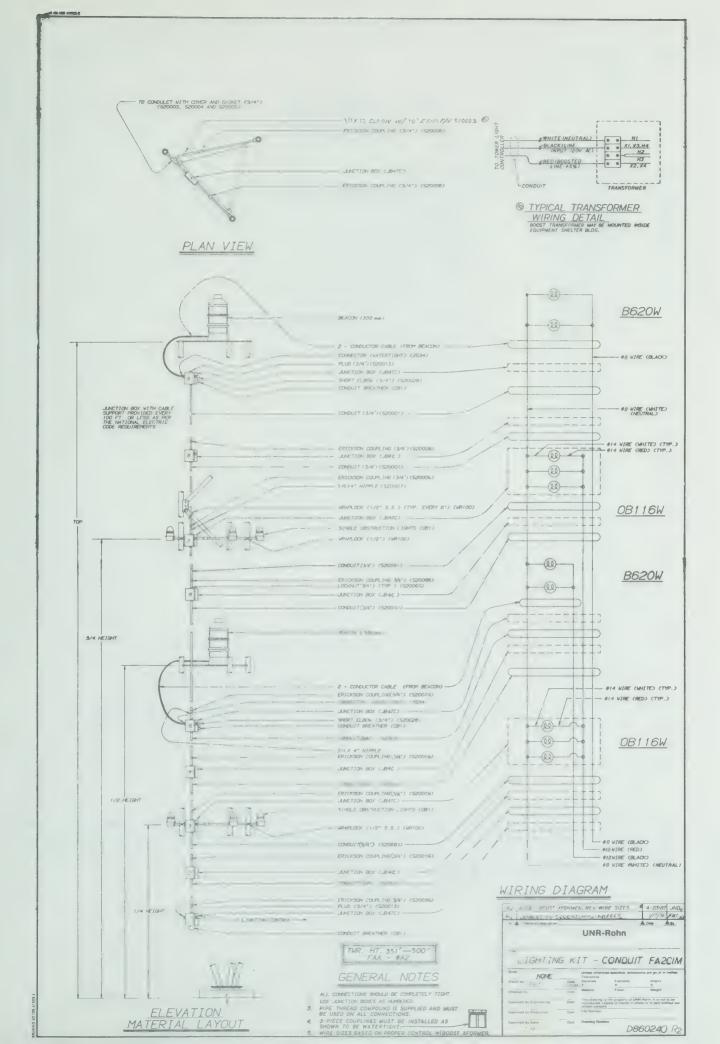
# 151' to 350' w/conduit

Qty.	Part Number	Description
3	OB1	Single obstruction lights
3	JB4TC	Junction boxes
2	JB4C	Junction boxes
1	2534	Water tight connector
1	520028	Short elbow 3/4"
2	CB1	Conduit breathers
6	520006	Erickson couplings 3/4"
8	520062	Pipe couplings 3/4"
2	520013	Plastic pipe plugs 3/4"
1	TB27A	TB condulet, gasket, and cover 3/4"
17	520002	Conduit lock nuts 3/4"
1	WR100	Can stainless steel wraplock (1/2" x 100')
1	520023	Can joint compound
25 '	530021	#14 wire (red)
25 '	530023	#14 wire (white)
2	520007	Conduit nipple 3/4" x 4"
-	530021	#14 wire (red) (1/2 tower height plus 15')
4	520009	Conduit nipples 3/4" x 18"
4	520010	Conduit nipples 3/4" x 24"
1	KH1665	Nipples 3/4" x 18" with 300 bend
1	OBLITECAT	Obstruction lighting catalog
1	A3LCA	Indoor alarm control with remote photocell
4	520008	Conduit nipples 3/4" x 12"
1.	BlR	Beacon w/red glass
4	B620W	Beacon bulbs (120 volt)
6	OB116W	Obstruction light bulbs (120 volt)
_	530006	#6 wire (white) (tower height plus 30')
_	530009	#8 wire (black) (tower height plus 30')
	520001	Rigid galvanized conduit 3/4" (tower height plus 10')
10'	520029	Rigid galvanized conduit 1/2" (for remote photocell)

Conversion kit may be required on self-supporting towers, depending upon base size, and would consist of required material for installing side lights on varying face width structures. Conversion kit must be ordered as a separate item. Additional information is available upon request.

NOTE: #6 black wire (530005) replaces #8 black wire (530009) if tower height exceeds 300'. Kit, as shown, will accommodate a 7' tower face.

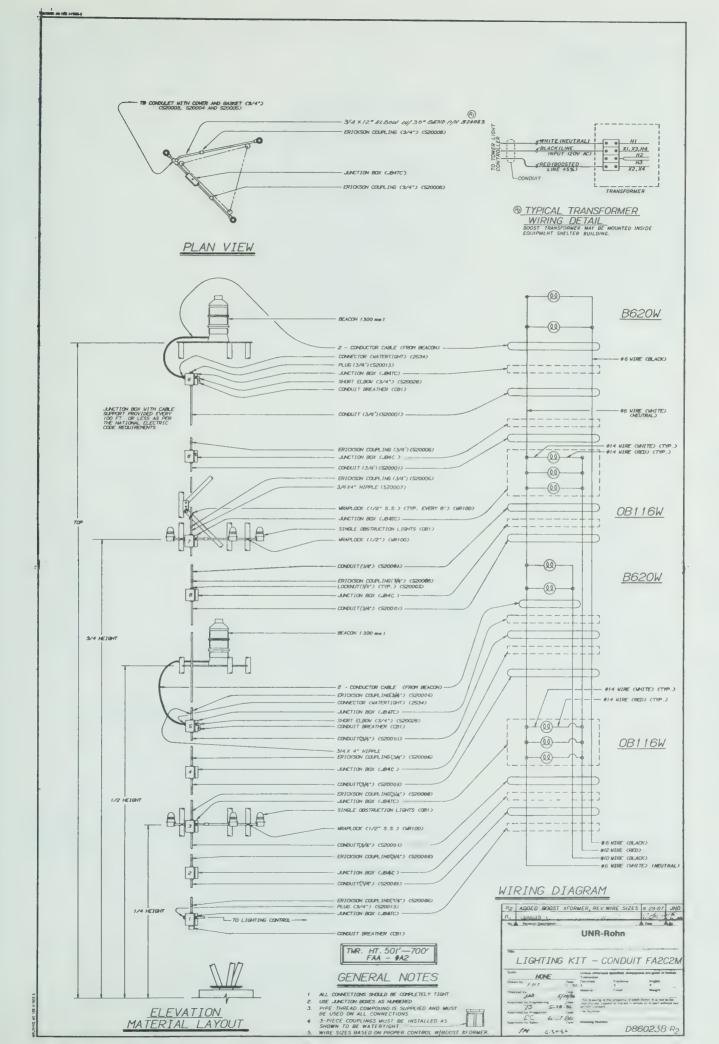
See Drawing No. C860486 for installation data.



# FA2ClM LIGHTING KIT

351' to 500' w/conduit

Oty.	Part Number	Description
6	OBl	Single obstruction lights
4	JB4C	Junction box
5	JB4TC	Junction boxes
2	2534	Water tight connectors
2	520028	Short elbows 3/4"
3	CBl	Conduit breathers
12	520006	Erickson couplings 3/4"
2	520013	Plastic pipe plugs 3/4"
2	TB27A	TB condulets, covers, and gaskets 3/4"
38	520002	Conduit lock nuts 3/4"
2	WR100	Cans stainless steel wraplock (1/2" x 100')
2	520023	Cans joint compound
50'	530021	#14 wire (red)
50'	530023	#14 wire (white)
5	520007	Conduit nipples 3/4" x 4"
8	520008	Conduit nipples 3/4" x 12"
8	520009	Conduit nipples 3/4" x 18"
8	520010	Conduit nipples 3/4" x 24"
18	520062	Pipe couplers 3/4"
2	520083	Nipples 3/4" x 12" with 30° bend
1	OBLITECAT	Obstruction lighting catalog
1	A5LCA	Indoor alarm control with remote photocell
1	FA2CMXFM	Boost transformer
2	BlR	Beacons w/red glass
8	B620W	Beacon bulbs (120 volt)
12	OB116W	Obstruction light bulbs (120 volt)
-	530012	#8 wire (white) (tower height plus 60')
-	530009	#8 wire (black) (tower height plus 60')
440	530017	#12 wire (red) (3/4 tower height plus 50')
-	530018	#12 wire (black) (1/2 tower height plus 40')
3.0.1	520001	Rigid galvanized conduit 3/4" (tower height plus 10')
10 '	520029	Rigid galvanized conduit 1/2" (for remote photocell)

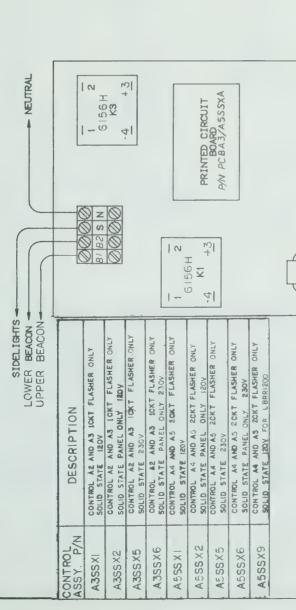


# FA2C2M LIGHTING KIT

501' to 700' w/conduit

Qty.	Part Number	Description
6	OBl	Single obstruction lights
4	JB4C	Junction boxes
5	JB4TC	Junction boxes
2	2534	Water tight connectors
2	520028	Short elbows 3/4"
3	CBl	Conduit breathers
12	520006	Erickson couplings 3/4"
2	520013	Plastic pipe plugs 3/4"
2	TB27A	TB condulets, covers, and gaskets 3/4"
38	520002	Conduit lock nuts 3/4"
2	WR100	Cans stainless steel wraplock (1/2" x 100')
2	520023	Cans joint compound
50'	530021	#14 wire (red)
50'	530023	#14 wire (white)
5	520007	Conduit nipples 3/4" x 4"
8	520008	Conduit nipples 3/4" x 12"
8	520009	Conduit nipples 3/4" x 18"
8	520010	Conduit nipples 3/4" x 24"
18	520062	Pipe couplers 3/4"
2	520083	Nipples 3/4" x 12" with 30° bend
1	OBLITECAT	Obstruction lighting catalog
1	A5LCA	Indoor alarm control with remote photocell
1	FA2CMXFM	Boost transformer
2	BlR	Beacons w/red glass
8	B620W	Beacon bulbs (120 volt)
12	OB116W	Obstruction light bulbs (120 volt)
_	530006	#6 wire (white) (tower height plus 60')
-	530005	#6 wire (black) (tower height plus 60')
-	530016	#10 wire (black) (1/2 tower height plus 40°)
	530017	#12 wire (red) (3/4 tower height plus 50')
-	520001	Rigid galvanized conduit 3/4" (tower height plus 10')
10'	520029	Rigid galvanized conduit 1/2" (for remote photocell)

PICTORIAL LAYOUT FOR A3SSX1 CONTROL



ASSEX! FEATURES & SPECIFICATIONS

PURPOSE: FLASHER CONTROL FOR STANDARD A-2 AND A-3 LIGHTING TOUR TOWERS 151' TO 450' TALL.

SPECIFICATIONS: FLASHER RATE - 26 FPM +-3 FPM
POWER INPUT - 108 - 132 VAC (120 VAC NOHINAL)
FLASHER OUTPUT - 1500 WATTS INCANDESCENT
SIDELGHT OUTPUT - 700 WATTS INCANDESCENT

FEATURES: 1.) FLASHER CIRCUIT IS LOW VOLTAGE AND ISOLATED FROM
THE POWER LINE .
2. LIGHT EMITTING DIODES INDICATE OPERATION OF EACH
SCETION OF CONTROL CIRCUITRY.
3. OPTIO-150LATED SOLID STATE POWER RELAYS PROVIDED ZERO
4.) TRANSIN FROMECTION RESPONDS TO UNANNED DANGEROUS
5. NOST COMPONENTS ARE AVAILABLE AT LOCAL DISTRIBUTORS.
6.) WILL DIRECTLY REPLACE SSTI AND ASX WITH SAME MOUNTTIGH HOLES.
7.) SOLID STATE RELAY WILL NOT SWITCH OFF WITHOUT A
MINIMUM LOAD OF ZOOD OWNS.

11 3,82 WRP DIAGRAM FOR A3SSX 9 - 8 - 9 - 10 the second of the property of UNA-Rohn It is not to be second of the se Uniess otherwise specified dimensions are given in notes.

Tolerance Fractions Angles Ang es R2 KIS-G-I WAS EOTIDED 4 JACDED BI ADDED CONTROL ASS'XS. & NOTE 7 UNR-Rohn O9/o7/82 ± Maler a: PICTORIAL Approved by Engineering
Approved by Production
Approved by Sales Sca & NONE Drawn by
KTL
Checked by

C821239 R

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SCHEMATIC DIAGRAM FOR PARTS IDENTIFICATION AND DESCRIPTION REFER

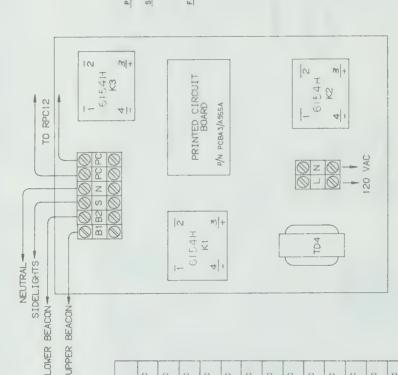
20 VAC

0 z 0

TD4

NOTE: K3 USED ON ASSSX1 THRU ASSSX5 & ASSSX9 OWY.

# PICTORIAL LAYOUT FOR A3SS1 CONTROL



CONTROL AZ AND A3 1CKT FLASHER AND PC SOLID STATE 120V

DESCR PTION

CONTROL ASSY, P/N

A3551

CONTROL A2 AND A3 ICKT FLASHER AND PC SOLID STATE PANEL ONLY 120V CONTROL AZ AND AZ 1CKT FLASHER AND PC SOLID STATE LESS HSG 120V CONTROL A2 AND A3 1CKT FLASHER AND PC SOLID STATE LESS RPC12 120V CONTROL A2 AND A3 1CKT FLASHER AND PC SOLID STATE 230V CONTROL A2 AND A3 1CKT FLASHER AND PC SOLID STATE PANEL ONLY 230V CONTROL A2 AND A3 1CKT FLASHER AND PC SOLID STATE LESS HSG 230V CONTROL AZ AND A3 1CKT FLASHER AND PC SOLID STATE LESS RPC12 230V CONTROL A4 AND A5 2CKT FLASHER AND PC SOLID STATE 120V CONTROL A4 AND A5 2CKT FLASHER AND PC SOLID STATE PANEL ONLY 120V

A3552 A3553 A3554 A3SS5 A3556 A3SS7 A3558

SCHEMATIC DIAGRAM FOR PARTS IDENTIFICATION AND DESCRIPTION REFER

# A3SSI FEATURES & SPECIFICATIONS

PURPOSE: COMBINATION FLASHER-PHOTO CONTROL FOR STANDARD A-2 AND A-3 LIGHTING FOR TOWERS 151' TO 450' TALL.

SPECIFICATIONS: FLASHER RAITE - 28 - FPM - 3 FPM
POWER INPUT - 108 - 132 VAC (120 VAC NOHINAL)
FLASHER DUTPUT - 1500 WATTS INCANDESCENT
SIDELIENT OUTPUT - 1500 WATTS INCANDESCENT
PHOTOCELL 10FN ON - ADJUSTABLE MCANDESCENT

FEATURES: 1.) FLASHER AND PHOTOCELL CIRCUIT ARE LOW VOLTAGE AND 1SOLATED FROM THE POWER LINE.

2.) LIGHTEMITING DIODES INDIGATE OFERATION OF EACH SECTION OF CONTROL CIRCUITRY.

3.) OFTO-ISOLATED SOLID STATE POWER RELAYS PROVIDE ZERO VOLTAGE SMITCHING LONGER LAMP LIFE AND REDUCE RFI.

4.) TRANSIENT ROUTCHING RESPONDS TO UNMANTED DANGEROUS SOLID RESPONDS TO UNMANTED DANGEROUS SOLID RESPONDS TO UNMANTED DANGEROUS SOLID STATE DIRECTLY REPLACE ROLS. SOLID STATE BLACK AVAILABLE AT LOCAL DISTRIBUTORS.

5.) MOST COMPONENTS ARE ANALLARE AT LOCAL DISTRIBUTORS.

6.) WILL DIRECTLY REPLACE ROLS. ROLSIPC. ASRC, ASRL, DESAY/SAME MONTING HOLES.

7. SOLID STATE RELAY WILL NOT SWITCH OFF WITHOUT A MINIMUM LOAD OF 2000 OHMS.

6-1082 RKB 6154 H WAS 61564; ADDED AJRIGICES TO NOTE #6 GIS 4H & GIS GIM WERE FOTIOCIA NOTE 7 ADDED CONTROL 22

Unarco-Rohn

PICTORIAL DIAGRAM FOR A3SSI

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File Number. Drawing Number 6/14/82 R DC 0-14-8ii Date Date Approved by Sales 6.111 A Approved by Production Scale NONE Drawn by

K7C

Checkers by

Weight

C820880 &

6-14 82

ATNO NOTE: K3 USED ON A5SS1 THRU A5SS10

SOLID STATE FOR LBRR -230V

CONTROL AZ AND A3 2CKT FLASHER AND PC SOLID STATE 120V FOR LBRR1200

A5559

A5\$\$10

A5558

ASSS7

CONTROL A4 AND A5 2CKT FLASHER AND PC SOLID STATE LESS RPC12 230V

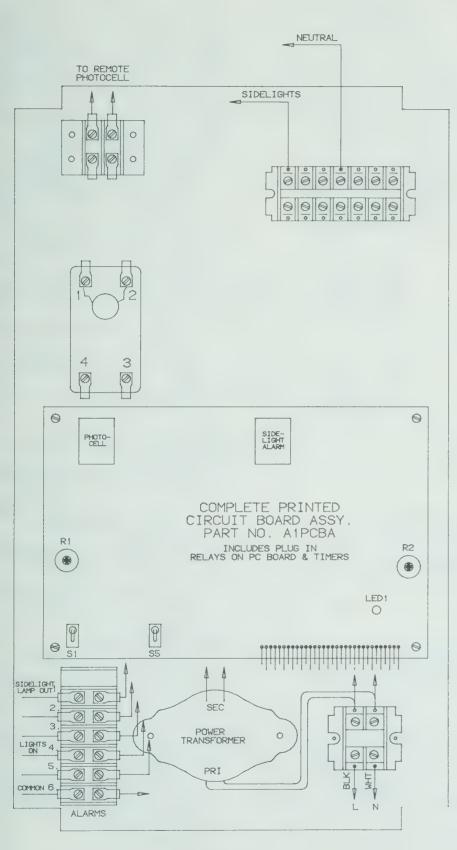
CONTROL A4 AND A5 2CKT FLASHER AND PC SOLID STATE LESS HSG 230V

CONTROL A4 AND A5 2CKT FLASHER AND PC SOLID STATE LESS HSG 120V CONTROL A4 AND A5 2CKT FLASHER AND PC SOLID STATE LESS RPC12 120V

A5552 A5553 A55S4 A5555 A55S6

A55S1

CONTROL A4 AND A5 2CKT FLASHER AND PC SOLID STATE 230V CONTROL A4 AND A5 2CKT FLASHER AND PC SOLID STATE PANEL ONLY 230V



# FIELD CALIBRATION PROCEDURE

MUST BE PERFORMED ON ALL A1 LIGHTING CONTROLS WITH ALARM TO INSURE CORRECT PHOTOCELL OPERATION AND CORRECT OPERATION OF THE SIDELIGHT ALARM CIRCUIT, CALIBRATION REQUIRES THE USE OF AN OHMMETER AND AN ADJUSTING TOOL (ADJUSTING TOOL IS PROVIDED WITH CONTROL).

BEFORE PROCEDING MAKE SURE THAT ALL SWITCHES ARE IN THEIR FULL DOWN POSITION CNOTE:SI IS A THREE POSITION SWITCH).

PHOTOCELL CALIBRATION PROCEDURE

1). SWITCH SI TO FULL UP POSITION

2). SLOWLY TURN RI UNTIL BOTH LED'S
ARE LIT. (USE ADJUSTING TOOL)

3). SLOWLY TURN RI IN THE OPPOSITE
DIRECTION UNTIL BOTH LED'S GO OFF
AND THEN STOP TURNING—DO NOT GO
BEYOND THIS POINT—CAREFULLY REMOVE
ADJUSTING TOOL.

4). RETURN SI TO FULL DOWN POSITION.
CALIBRATION COMPLETED.

CALIBRATION COMPLETED.

SIDELIGHT ALARM CALIBRATION PROCEDURE

1).CONNECT OHMMETER LEADS ACROSS
ALARM TERMINAL STRIP FROM TERMINAL
#1 TO #6.

2).SMITCH SI TO THE CENTER POSITION
(SIDELIGHTS SHOULD NOW BE LIT).

3).SLOWLY TURN R2 WITH ADJUSTING TOOL
UNTIL OHMMETER INDICATES THAT
ALARM RELAY CONTACTS CLOSE.

IF OHMMETER DOES NOT INDICATE CONTACT CLOSURE, REVERSE DIRECTION UNTIL IT DOES.

4).SLOWLY TURN R2 IN THE OPPOSITE DIRECTION UNTIL THE OHMMETER INDICATES THAT ALARM RELAY CONTACTS

OPEN.

5).DISCONNECT OHMMETER AND RETURN S1
TO THE DOWN POSITION.
CALIBRATION COMPLETED.

# FIELD TEST PROCEDURE

BEGIN TESTING BY SWITCHING S1 TO THE CENTER POSITION, THIS WILL TURN ON ALL TOWER LIGHTS.

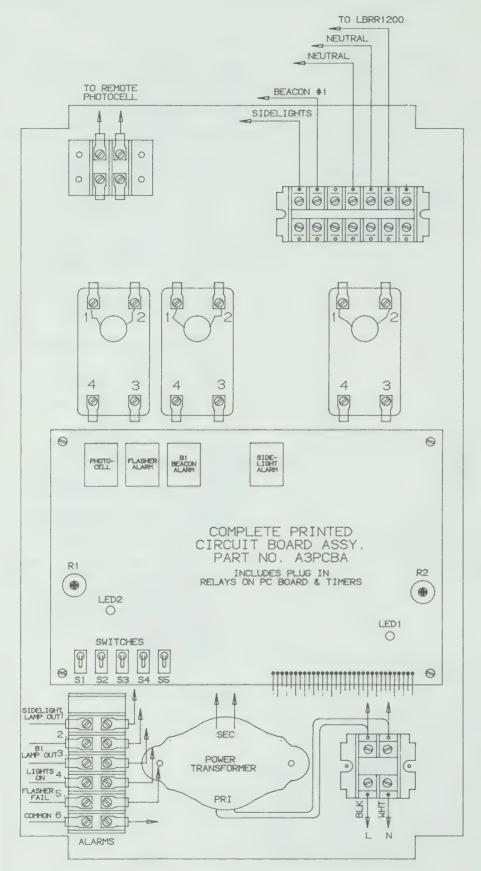
SIDELIGHT LAMP FAILURE ALARM SIMULATION
1).CONNECT OHMMETER LEADS ACROSS THE ALARM TERMINAL BLOCK FROM TERM.

ALARM TERMINAL BLOCK FROM TERM.
#1 TO #6.
2).SWITCH SS TO THE UP POSITION.THIS
SHOULD INDICATE AN ALARM RELAY CON—
TACT CLOSURE ON THE OHMMETER.
3).RETURN SS TO THE DOWN POSITION.
TEST COMPLETED.

# POWER FAILURE ALARM SIMULATION(ALL ALARMS)

1).TURN POWER OFF TO THE CONTROL AT THE BREAKER PANEL.
2).CONNECT THE OHMMETER TO TERM. #6
THEN TO EACH OF THE OTHER TERMINALS
ONE AT A TIME. (EXCEPT #2, #3, #5) AN ALARM RELAY CONTACT CLOSURE SHOULD BE INDICATED ON THE OHMMETER AT EACH TERMINAL.
3).TURN THE POWER BACK ON AT THE BREAKER PANEL.
TEST COMPLETED.

RETURN SWITCH S1 TO THE FULL DOWN POSITION TO RESUME NORMAL OPERATION OF THE LIGHTING CONTROL.



# FIELD CALIBRATION PROCEDURE

MUST BE PERFORMED ON ALL AS LIGHTING CONTROLS WITH ALARM TO INSURE CORRECT PHOTOCELL OPERATION AND CORRECT OPERA-TION OF THE SIDELIGHT ALARM CIRCUIT.

CALIBRATION REQUIRES THE USE OF AN OHMMETER AND AN ADJUSTING TOOL (ADJUSTING TOOL IS PROVIDED WITH CONTROL).

BEFORE PROCEDING MAKE SURE THAT ALL SWITCHES ARE IN THEIR FULL DOWN POSITION (NOTE:S1 IS A THREE POSITION SWITCH).

PHOTOCELL CALIBRATION PROCEDURE

HOTOCELL CALIBRATION PROCEDURE

T):SWITCH ST TO FULL UP POSITION

2):SLOWLY TURN R1 UNTIL BOTH LED'S

ARE LIT.(USE ADJUSTING TOOL)

3):SLOWLY TURN R1 IN THE OPPOSITE

DIRECTION UNTIL BOTH LED'S GO OFF

AND THEN STOP TURNING-DO NOT GO

BEYOND THIS POINT-CAREFULLY REMOVE

ADJUSTING TOOL,

4):RETURN S1 TO FULL DOWN POSITION,

CALIBRATION COMPLETED.

SIDELIGHT ALARM CALIBRATION PROCEDURE

1) CONNECT OHMMETER LEADS ACROSS
ALARM TERMINAL STRIP FROM TERMINAL

#1 TO #6. 2).SWITCH S1 TO THE CENTER POSITION

(SIDELIGHTS SHOULD NOW BE LIT).

3) SLOWLY TURN R2 WITH ADJUSTING TOOL
UNTIL OHMMETER INDICATES THAT
ALARM RELAY CONTACTS CLOSE.

IF OHMMETER DOES NOT INDICATE CONTACT CLOSURE, REVERSE DIRECTION UNTIL IT DOES.

4).SLOWLY TURN R2 IN THE OPPOSITE DIRECTION UNTIL THE OHMMETER INDUICATES THAT ALARM RELAY CONTACTS

5).DISCONNECT OHMMETER AND RETURN \$1 TO THE DOWN POSITION. CALIBRATION COMPLETED,

# FIELD TEST PROCEDURE

BEGIN TESTING BY SWITCHING SI TO THE CENTER POSITION, THIS WILL TURN ON ALL TOWER LIGHTS.

SIDELIGHT LAMP FAILURE ALARM SIMULATION

1).CONNECT OHMMETER LEADS ACROSS THE
ALARM TERMINAL BLOCK FROM TERM.
#1 TO #6.

2).SWITCH S5 TO THE UP POSITION.THIS
SHOULD INDICATE AN ALARM RELAY CONTACT CLOSURE ON THE OHMMETER.

3).RETURN S5 TO THE DOWN POSITION.
TEST COMPLETED.

BI-BEACON LAMP FAILURE ALARM SIMULATION

1) CONNECT OHMMETER LEADS ACROSS THE
ALARM TERM. BLOCK FROM TERMINAL
#3 TO #6.

2) SWITCH S2 TO THE UP POSITION. AFTER
A FEW SECONDS THE OHMMETER SHOULD
INDICATE AN ALARM RELAY CONTACT
CLOSURE.

CLOSURE.

3) RETURN S2 TO THE DOWN POSITION.
TEST COMPLETED.

TEST COMPLETED.

FLASHER ALARM SIMULATION

1).CONNECT OHMMETER LEADS ACROSS THE ALARM TERM. BLOCK FROM TERMINAL #5 TO #6.

2).SWITCH S3 TO THE UP POSITION.THIS SHOULD INDICATE AN ALARM RELAY CONTACT CLOSURE ON THE OHMMETER. (BEACON LAMPS SHOULD BE LIT & BURNING STEADY)

3).RETURN S3 TO THE DOWN POSITION. TEST COMPLETED.

# POWER FAILURE ALARM SIMULATION(ALL ALARMS)

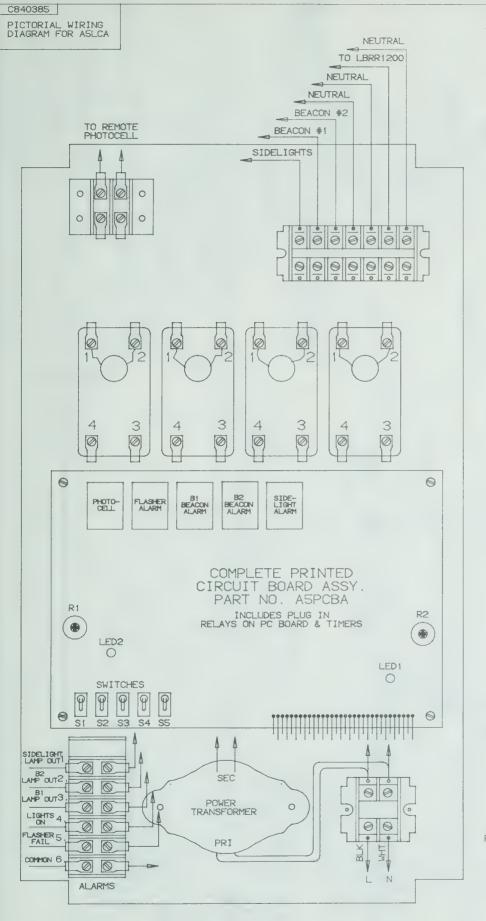
ER FAILURE ALARM SIMULATIONCALL ALARMS)

1). TURN POWER OFF TO THE CONTROL AT THE BREAKER PANEL.

2). CONNECT THE OHIMMETER TO TERM. #6
THEN TO EACH OF THE OTHER TERMINALS
ONE AT A TIME. CEXCEPT #2) AN ALARM
RELAY CONTACT CLOSURE SHOULD BE
INDICATED ON THE OHMMETER AT EACH
TERMINAL.

3). TURN THE POWER BACK ON AT THE
BREAKER PANEL.
TEST COMPLETED.

RETURN SWITCH SI TO THE FULL DOWN POSITION TO RESUME NORMAL OPERATION OF THE LIGHTING CONTROL.



# FIELD CALIBRATION PROCEDURE

MUST BE PERFORMED ON ALL AS LIGHTING CONTROLS WITH ALARM TO INSURE CORRECT PHOTOCELL OPERATION AND CORRECT OPERA-SIDELIGHT ALARM CIRCUIT

CALIBRATION REQUIRES THE USE OF AN OHMMETER AND AN ADJUSTING TOOL (ADJUSTING TOOL IS PROVIDED WITH CONTROL).

BEFORE PROCEDING MAKE SURE THAT ALL SWITCHES ARE IN THEIR FULL DOWN POSITION (NOTE:S1 IS A THREE POSITION SWITCH).

PHOTOCELL CALIBRATION PROCEDURE

1).SWITCH S1 TO FULL UP POSITION

2).SLOWLY TURN R1 UNTIL BOTH LED'S

ARE LIT. (USE ADJUSTING TOOL)

3).SLOWLY TURN R1 IN THE OPPOSITE

DIRECTION UNTIL BOTH LED'S GO OFF

AND THEN STOP TURNING-DO NOT GO

BEYOND THIS POINT-CAREFULLY REMOVE

ADJUSTING TOOL.

4).RETURN S1 TO FULL DOWN POSITION.

CALIBRATION COMPLETED.

CALIBRATION COMPLETED.

SIDELIGHT ALARM CALIBRATION PROCEDURE

1).CONNECT OHMMETER LEADS ACROSS
ALARM TERMINAL STRIP FROM TERMINAL
#1 TO #6.

2).SWITCH S1 TO THE CENTER POSITION
(SIDELIGHTS SHOULD NOW BE LIT).

3).SLOWLY TURN R2 WITH ADJUSTING TOOL
UNTIL OHMMETER INDICATES THAT
ALARM RELAY CONTACTS CLOSE.

IF OHMMETER DOES NOT INDICATE CONTACT CLOSURE, REVERSE DIRECTION UNTIL IT DOES.

4).SLOWLY TURN R2 IN THE OPPOSITE DIRECTION UNTIL THE OHMMETER INDICATES THAT ALARM RELAY CONTACTS

5).DISCONNECT OHMMETER AND RETURN SI TO THE DOWN POSITION. CALIBRATION COMPLETED.

# FIELD TEST PROCEDURE

BEGIN TESTING BY SWITCHING S1 TO THE CENTER POSITION, THIS WILL TURN ON ALL TOWER LIGHTS.

SIDELIGHT LAMP FAILURE ALARM SIMULATION
1).CONNECT OHMMETER LEADS ACROSS THE
ALARM TERMINAL BLOCK FROM TERM.

ALARM TERMINAL BLUCK FRUM TERM. #1 TO #6. 2).SWITCH S5 TO THE UP POSITION.THIS SHOULD INDICATE AN ALARM RELAY CON— TACT CLOSURE ON THE OHMMETER. 3).RETURN S5 TO THE DOWN POSITION. TEST COMPLETED.

B1-BEACON LAMP FAILURE ALARM SIMULATION
1).CONNECT OHMMETER LEADS ACROSS THE
ALARM TERM. BLOCK FROM TERMINAL
#3 TO #6.
2).SWITCH S2 TO THE UP POSITION. AFTER
A FEW SECONDS THE OHMMETER SHOULD
INDICATE AN ALARM RELAY CONTACT
CLOSURE

INDICATE AN ALARM RELAT COLUMN INDICATE AN ALARM RELAT COLUMN RESTORM.

3) RETURN S2 TO THE DOWN POSITION. TEST COMPLETED.

B2-BEACON LAMP FAILURE ALARM SIMULATION 1). CONNECT OHMMETER LEADS ACROSS THE ALARM TERM. BLOCK FROM TERMINAL #2 TO #6.

2) SWITCH S4 TO THE UP POSITION. AFTER A FEW SECONDS THE OHMMETER SHOULD INDICATE AN ALARM RELAY CONTACT CLOSURE.

CLOSURE.

3) RETURN S4 TO THE DOWN POSITION.
TEST COMPLETED.

TEST COMPLETED.

FLASHER ALARM SIMULATION

1), CONNECT OHMMETER LEADS ACROSS THE ALARM TERM, BLOCK FROM TERMINAL.

#5 TO #6.

2), SWITCH S3 TO THE UP POSITION, THIS SHOULD INDICATE AN ALARM RELAY CONTACT CLOSURE ON THE OHMMETER.

(BEACON LAMPS SHOULD BE LIT & BURNING STEADY)

3), RETURN S3 TO THE DOWN POSITION.

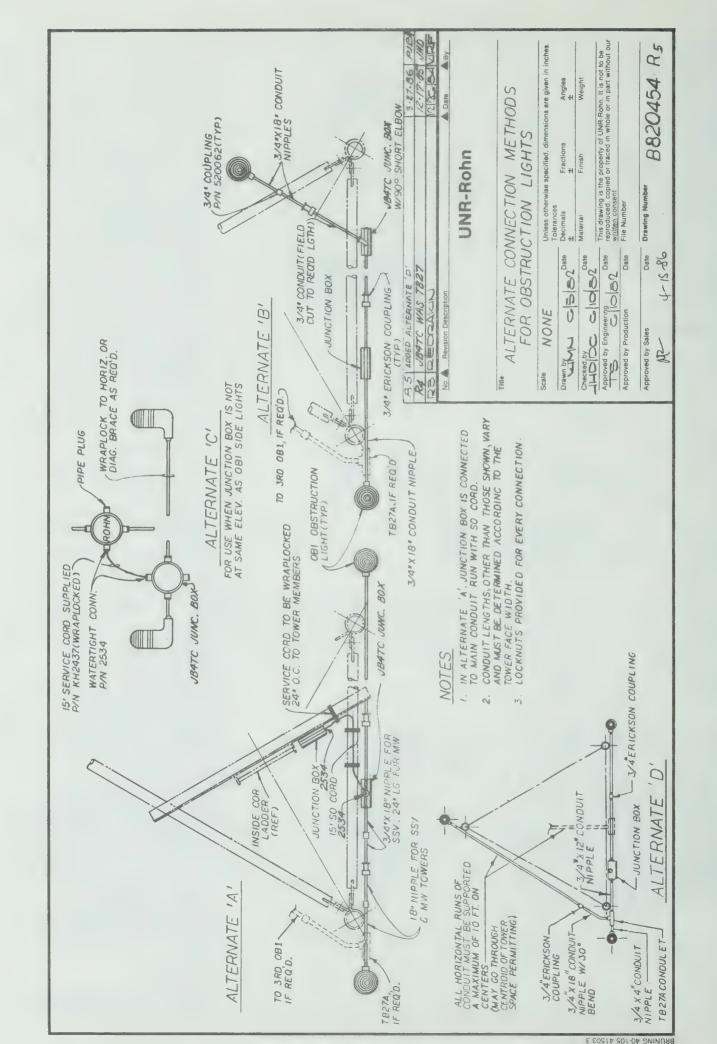
TEST COMPLETED.

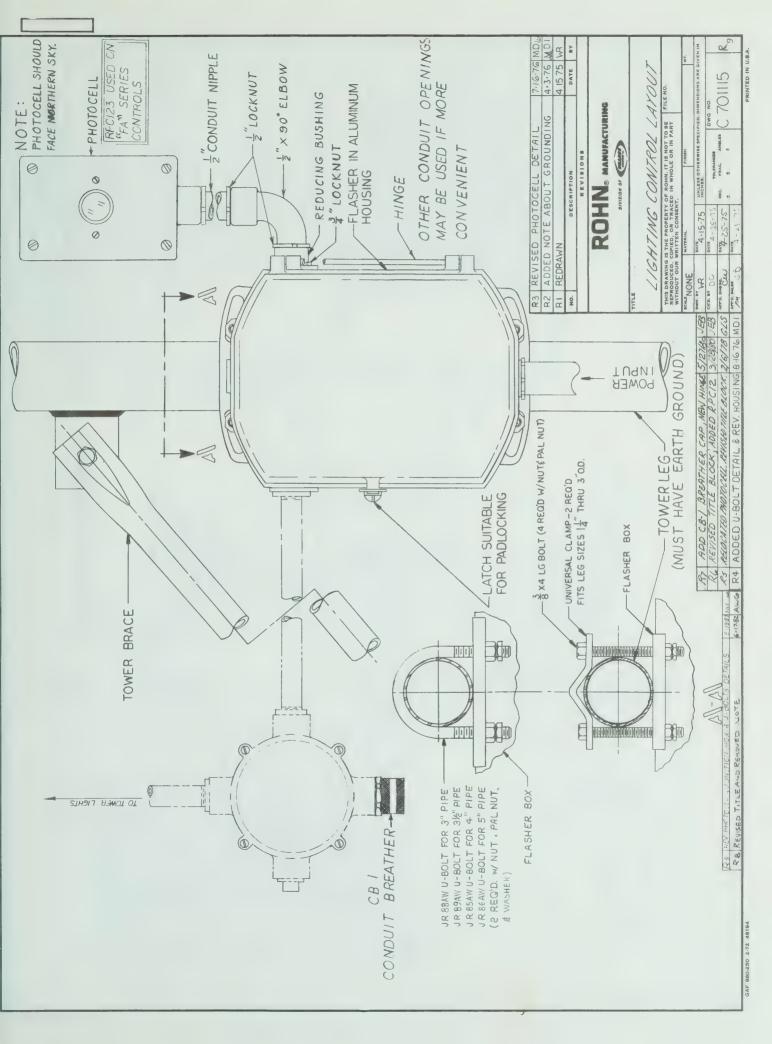
POWER FAILURE ALARM SIMULATION(ALL ALARMS)

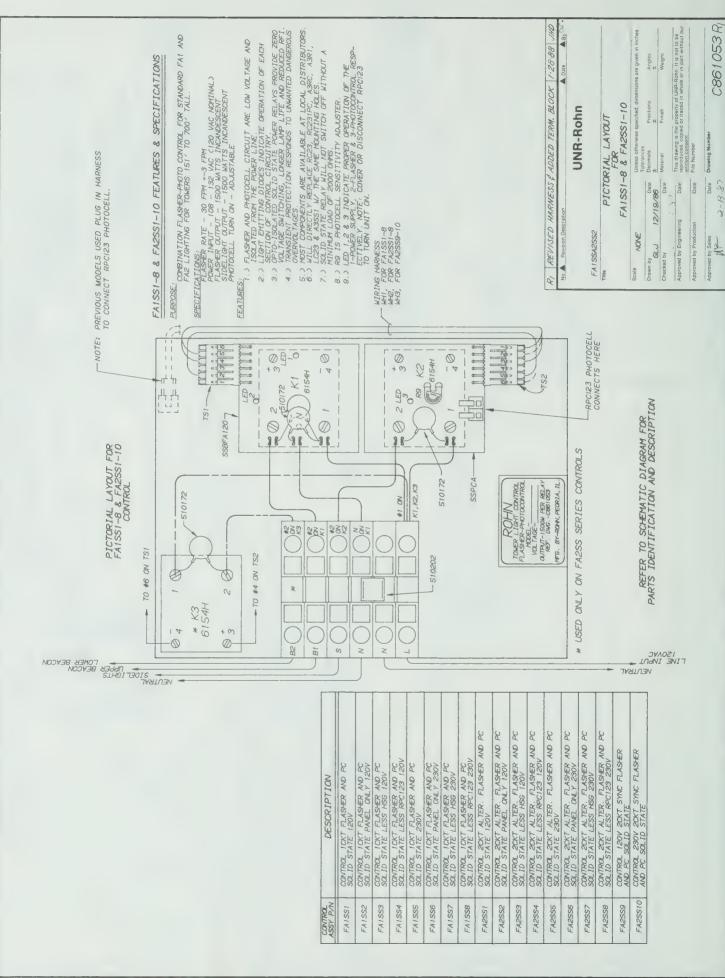
1). TURN POWER OFF TO THE CONTROL AT THE BREAKER PANEL.
2). CONNECT THE OHMMETER TO TERM. #6
THEN TO EACH OF THE OTHER TERMINALS
ONE AT A TIME. AN ALARM AN ALARM
RELAY CONTACT CLOSURE SHOULD BE
INDICATED ON THE OHMMETER AT EACH
TERMINAL

TERMINAL.
TURN THE POWER BACK ON AT THE
BREAKER PANEL.
TEST COMPLETED. 3) TURN

RETURN SWITCH S1 TO THE FULL DOWN POSITION TO RESUME NORMAL OPERATION OF THE LIGHTING CONTROL.

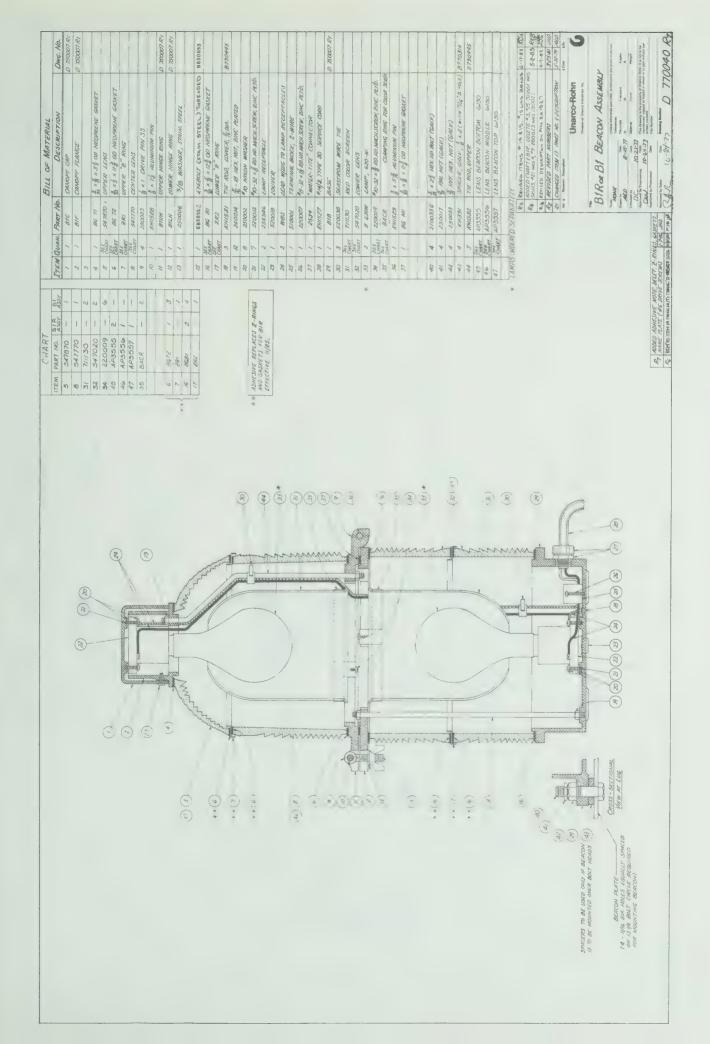


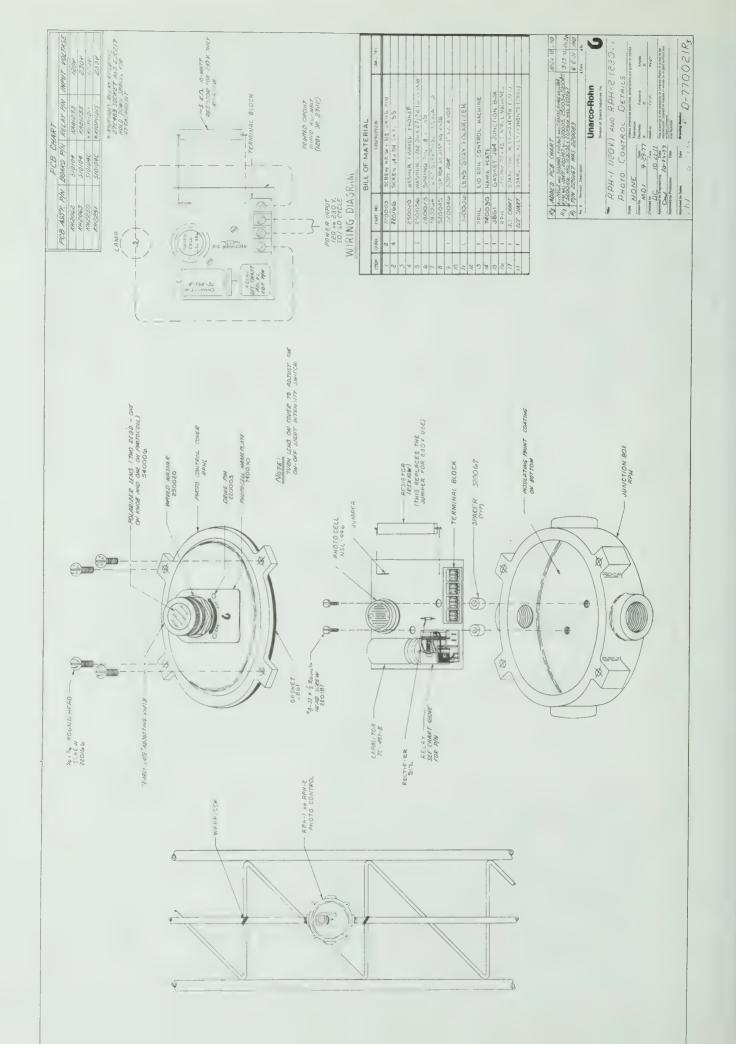


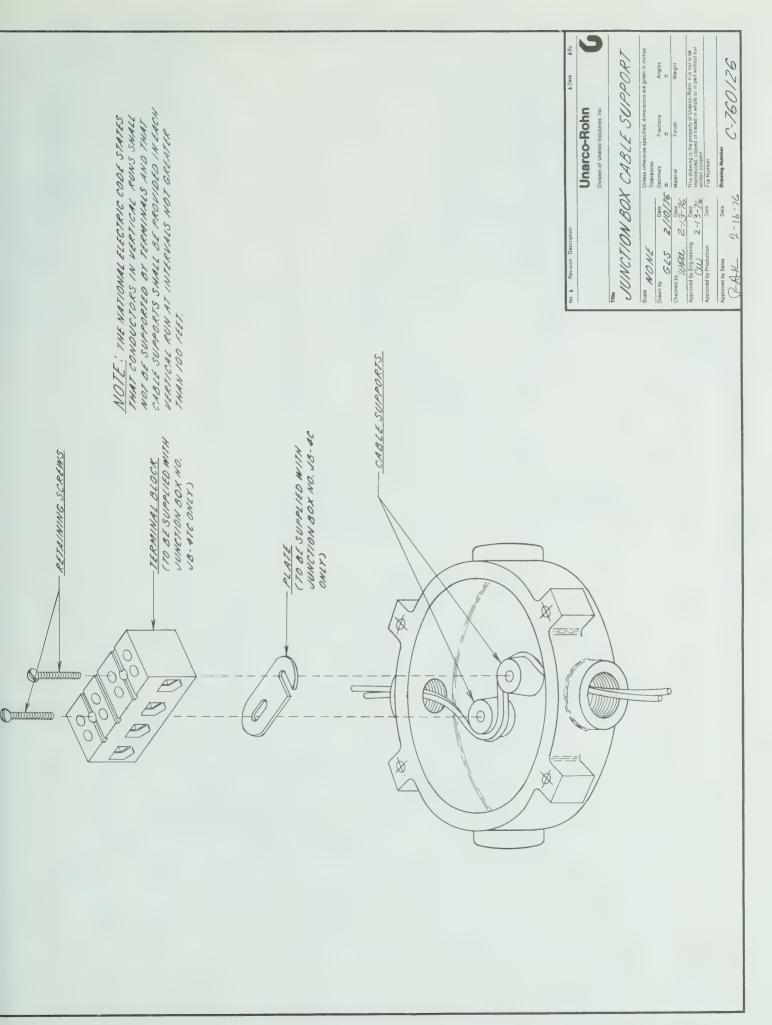


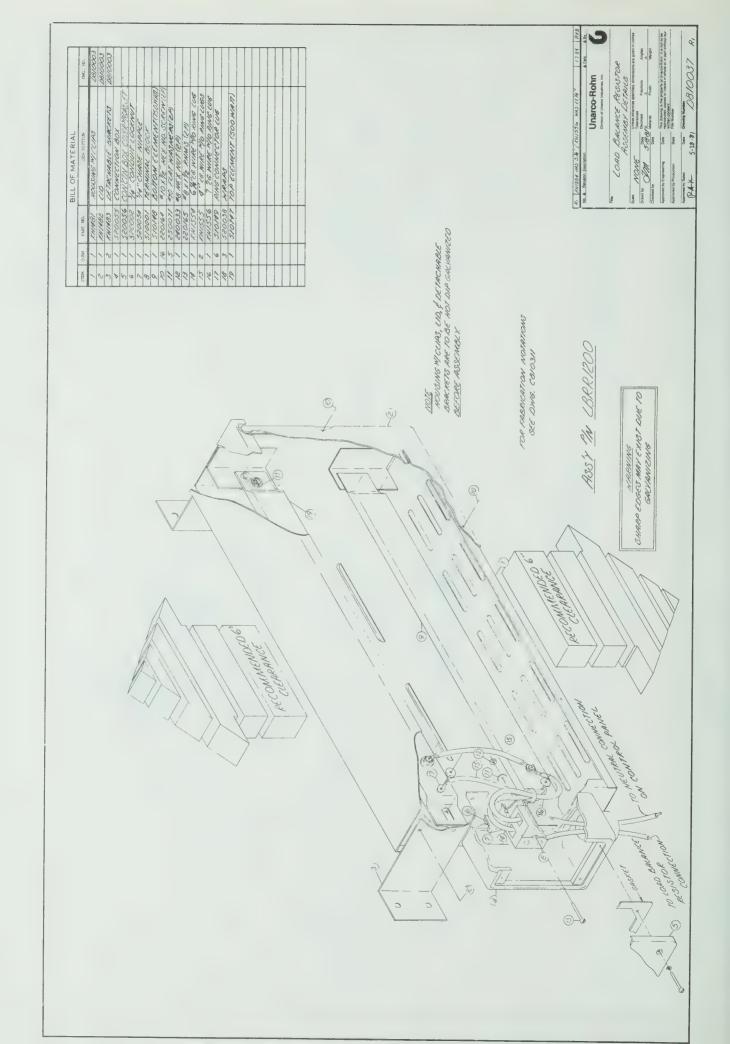
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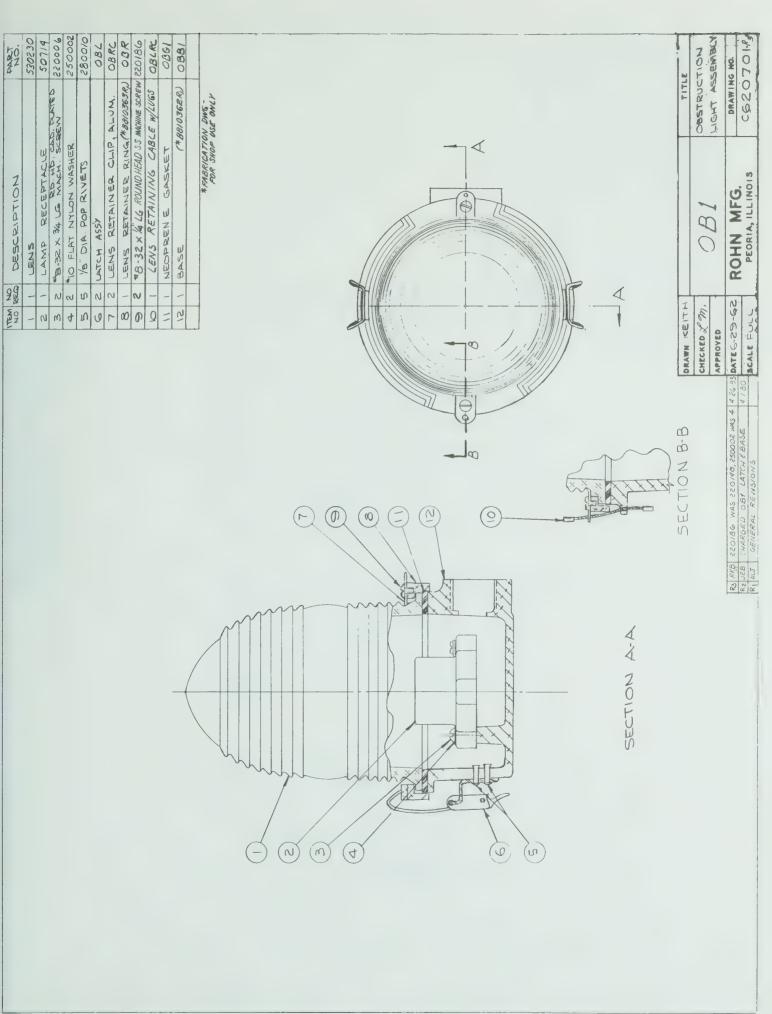
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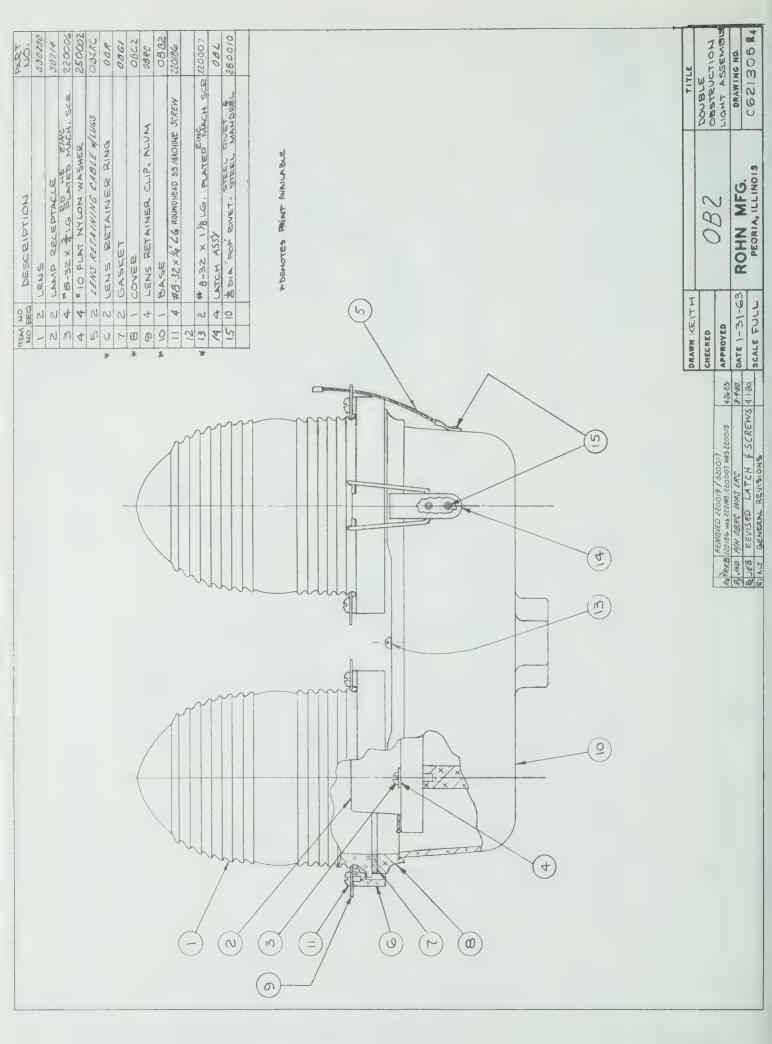












Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

**ROHN** recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

### All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

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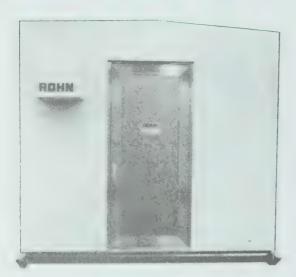
# ROHN®

# EQUIPMENT SHELTERS



VERSATILE EQUIPMENT PROTECTION

# ROHN. SHELTERS.....



Standard sizes available from 8' x 8' to 12' x 20' with 8' ceiling.



Custom designed and engineered to fit specific equipment.



Rohn Equipment Shelters are built around your equipment protection needs. Nothing is left to chance. The protection of your sensitive equipment is our prime concern.

Each shelter has standard features such as finest grade construction materials, insulation that will meet or exceed the specifications set by your engineering and design requirements, top quality electrical materials, and fiberglass construction unsurpassed for strength and durability.

Construction of the basic shelter is done to Rohn's high quality standards. A complete environmental control system is available in each Rohn Shelter. Security will be no problem with our optional reinforced insulated aluminum doors with three-point locking systems. In short, your shelter will be a complete protection system.

# PERMANENT INSTALLATION WITH MODULAR FEATURES

Each Rohn Equipment Shelter is a complete, self-contained unit. The under carriage of the shelter is designed to be fastened to a concrete foundation and can be slid into place and removed at a later date. The under carriage skid is "hot dip" galvanized for longer life. Your needs dictate the equipment design. If one of Rohn's many standard shelters will fit your needs then our staff will assist in selection. Each unit is designed to maintain a constant environment for your equipment.

Rohn also makes available units of modular design for applications requiring larger shelters. In many cases, plans must be made for vast equipment updates and additions. Rohn can supply shelters with either add-on capability or in large two-piece designs shipped to the site completely furnished inside and out with only minor assembly required in the field.





Many standard features with numerous options available.

# .....Protection Systems!

#### STHETICALLY APPEALING.

The contoured design of the smooth lines of the Rohn Equipment Shelter is an enhancement to any installation. There is no tin shed or concrete bunker appearance. The innovative design of a Rohn Shelter has clean lines that are not objectionable regardless of the setting.

#### OLORS AVAILABLE.

Rohn Shelters are available in colors of your choice upon request. The color of a Rohn Shelter is permanently bonded in the body of the fiberglass so there will be no chalking, fading, color drop off, or other unsightly appearance due to weather conditions.

#### USTOM ARCHITECTURAL DESIGN.

Shelters including custom trim and design match such as stucco, brick, etc., are available at additional cost. Rohn designs lend themselves to custom modification to satisfy each customers needs. Complete installation at Rohn's plant of customer furnished equipment by expert craftsmen is available.

#### ASY INSTALLATION.

Installation of a Rohn Shelter is as simple as 1-2-3. There will be no surprise assembly instructions. Each shelter is shipped completely assembled and ready for installation. All mechanical and electrical equipment has been thoroughly tested at Rohn's plant before shipment. All that is needed for site preparation is foundation and service hook-ups. Rohn will provide you with a location drawing for both foundation and service entrances so site preparation can be done well in advance of shelter arrival. Upon receipt of the shelter, all that need be done is set it in place and connect the services. Ready for equipment installation at your convenience, the Rohn Shelter is a functioning equipment protection system from that point on.





Complete turn-key installation and special services available on request.



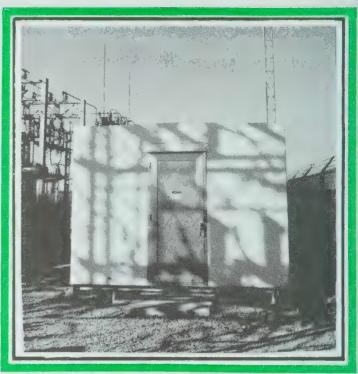
Maximum equipment protection.



No on-site assembly required. Easy installation.







# DESIGNED AND CONSTRUCTED WITH VERSATILITY OF PERFORMANCE AND MINIMUM MAINTENANCE IN MIND.

The finest grade construction materials are used throughout the shelter. Fiberglass laminated construction gives each shelter outstanding strength. It also provides a maintenance-free exterior and minimum maintenance interior. Standard shelters range from 8' x 8' to 12' x 20' with a floor to ceiling height of 8'. Top quality electrical materials are used to

provide sufficient service without modification. A complete environmental control system is available for each shelter. The final innovative touch is installation with minimum site preparation.

Rohn Shelters are the optimum in equipment protection. For more information on Rohn Equipment Shelters, contact us today.



PO BOX 2000 PEORIA, IL 61656 TWX: 910-652-0646 FAX: 309-697-4400

#### EQUIPMENT SHELTERS, ELECTRICAL PACKAGES AND ACCESSORIES

#### STANDARD EQUIPMENT SHELTERS:

Laminated "Sandwich" Constructed of High Grade Lumber. Floor Constructed of 4x4 Lumber. Wall and Roof Constructed of 2x4, 2x6 Lumber, Waferboard, and Plywood. Insulated with Fiberglass Bat with Vapor Barrier.

Exterior Skin is Laminated Fiberglass Composite with 15 Mils of Gel Coat. Shelter is Furnished Complete with Hot Dip Galvanized Structural Steel Skid and 3' x 7' Insulated Steel/Aluminum Door with Keyed Lock Set and Dead Bolt, Keyed Alike. Standard Color - Desert Tan.

DIMENSIONS				DIMENSIONS				DIMENSIONS						
PART NO.	(W)	(L)	(H)	WT.	PART NO.	(W)	(L)	(H)	WT.	PART NO.	(W)	(L)	(H)	WT.
ESB88	81	8'	81	2625	ESB889	81	8 *	9'	2721	ESB8810	81	8 '	10'	2817
ESB810	81	10'	8'	3240	ESB8109	8 '	10'	91	3348	ESB81010	8 '	10'	10"	3456
ESB812	81	12'	81	3840	ESB8129	8 1	121	91	3960	ESB81210	8 "	12'	10'	4080
ESB814	8 1	14'	8 *	4425	ESB8149	8 1	14'	91	4557	ESB81410	8 '	14'	10'	4689
ESB816	8	16'	81	4990	ESB8169	8	16'	91	5134	ESB81610	8	16'	101	5278
ESB818	8	18'	8 1	5545	ESB8189	8	18'	91	5701	ESB81810	8	18'	10'	5857
ESB820	8 '	20 "	8 1	6080	ESB8209	8 *	20'	9 '	6248	ESB82010	8 1	20 '	10'	6416
ESB1010	10'	10'	81	4050	ESB10109	10'	10'	91	4170	ESB101010	10'	10'	10'	4290
ESB1012	10'	12"	8 *	4800	ESB10129	10'	12'	91	4932	ESB101210	101	12'	10 *	5064
ESB1014	10'	141	8 "	5530	ESB10149	10'	14"	91	5674	ESB101410	10'	14'	10'	5818
ESB1016	10 '	16'	81	6240	ESB10169	10'	16'	91	6396	ESB101610	10'	16'	10'	6552
ESB1018	101	18'	8 *	6930	ESB10189	10'	181	91	7098	ESB101810	10'	18'	10'	7266
ESB1020	10'	20 '	81	7600	ESB10209	10'	20 1	91	7780	ESB102010	10'	20'	10'	7960
ESB1212	12'	12"	81	5760	ESB12129	12'	12'	91	5904	ESB121210	12'	12'	10'	6048
ESB1214	121	14"	81	6720	ESB12149	12'	14'	91	6876	ESB121410	12'	14"	101	7032
ESB1216	12'	16'	81	7680	ESB12169	12'	16'	91	7848	ESB121610	12'	16'	10'	8016
ESB1218	12'	18'	81	8640	ESB12189	12'	18'	91	8820	ESB121810	12'	181	10'	9000
ESB1210	12'	20"	81	9600	ESB12209	12'	20'	91	9792	ESB121010	12'	20	10'	9984
ESBIZZU	12.	20.	9.	5000	E3D14409	12	20	9	2134	E3D122010	12	20	10.	2384

#### BASIC STANDARD ELECTRICAL PACKAGES:

Surface Mounted, EMT Conduit. Grounded, Duplex Outlets, One (1) Every 4' on Three Walls Standard. Fluorescent Lights (Two Bulb Fixtures) with Switch. 100 Amp 120/240 V.A.C. Main, 20 Position Breaker Box (Grounded to Skid) with 12 Single Pole 20 Amp Breakers. All Electrical Work Conforms to the National Electrical Code.

		QTY.(1 GANG)	QTY. FLUORESCENT	
PART NUMBER	SHELTER SIZE	OUTLET BOXES	LIGHT FIXTURES	WT.
ESEP88	8' x 8'	4	2 - 4"	67
ESEP810	8' x 10'	6	2 - 4'	76
ESEP812	8' x 12'	8	4 - 4*	99
ESEP814	8' x 14'	8	4 - 41	104
ESEP816	8' x 16'	10	4 - 4"	113
ESEP818	8' x 18'	10	6 - 4 1	132
ESEP820	8 * x 20 *	12	6 - 4"	141
ESEP1010	10' x 10'	6	2 - 4*	81
ESEP1012	10' x 12'	8	4 - 4 *	104
ESEP1014	10' x 14'	8	4 - 4"	109
ESEP1016	10' x 16'	10	4 - 4"	118
ESEP1018	10' x 18'	10	6 - 4 *	137
ESEP1020	10° x 20°	12	6 - 4"	146
ESEP1212	12' x 12'	8	4 - 4 1	104
ESEP1214	12' x 14'	10	6 - 4'	127
ESEP1216	12' x 16'	10	6 - 4"	132
ESEP1218	12' x 18'	12	8 - 4"	155
ESEP1220	12' x 20'	14	8 - 4"	164
PI POMPIONI ACCECCO	DIFC.			

#### ELECTRICAL ACCESSORIES:

ELECTRICAL AC	CESSULID.	
ESLC1	Load Center, 200 amp, 120/240 volt, single phase with cover	30 55
ESLC2	Load Center, 200 amp, 120/208 volt, three phase with cover	20
ESMTS1	Manual Transfer Switch, 100 amp, 120/240 volt, single phase	34
ESMTS2	Manual Transfer Switch, 200 amp, 120/208 volt, three phase S/N	75
ESBRK1	Breaker (Single Pole, 120 volt, 20 amp)	1/4
ESBRK2	Breaker (Two Pole, 240 volt, 20 amp)	1/2
ESRECP1	Receptacle (Hubbell #2310, Twist Lock, Single with Male Hubbell #2311 Plug,	1
	120 volt, 20 amp)	1
ESRECP2	Receptacle (Duplex, 120 volt, 20 amp)	2
ESRECP3	Receptacle (Double Duplex, 120 volt, 20 amp)	2-1/4
ESRECP4	Receptacle - Outdoor (Duplex, Ground Fault, 120 volt, 15 amp)	2
ESGRDBAR	Copper Ground Bus Bar $(1/4$ x $1-1/4$ x $12$ Long with Holes every $1-1/2$ , Grounded to Skid)	4
ESARREST	Lightning Arrestor (Joslyn #J9200)	1
BGK1	Ground Rod Kit (Includes Lugs, Wire and Ground Rod)	8

NOTE: Shelter electrical packages and accessories cannot be supplied unless equipment shelter is purchased from UNR-Rohn.

#### Prices available upon request.

(Replaces D-2269)

#### ROHN ACCESCORIE

	ROHN EQUIPMENT SHELTER ACCESSORIES	
PART NUMBER	DESCRIPTION	WT.
AIR CONDITIONERS:	(Through the Wall, Single Phase with Integral Thermostat)	
ESAC5800	5,800 BTU, 120 volt	108
ESAC9500/115	9,500 BTU, 120 volt	116
ESAC9500	9,500 BTU, 240 volt	116
ESAC11400 ESAC14700	11,400 BTU, 240 volt 14,700 BTU, 240 volt	116 151
ESAC18500	18,500 BTU, 240 volt	180
ESAC22900	22,900 BTU, 240 volt	210
AIR CONDITIONERS	& HEAT STRIPS: (Through the Wall, Single Phase with Integral Thermostat, 240 Volt)	
ESACH11400	11,400 BTU Cooling and 3.7 kw Heat Strip	117
ESACH11400	14,500 BTU Cooling and 3.5 kw Heat Strip	190
ESACH17600	17,600 BTU Cooling and 4.5 kw Heat Strip	179
(Note: Heat Strip	ps Must Be Manually Switched From Cool Cycle)	
AIR CONDITIONERS	& HEAT STRIPS: (Outside Wall Mounted, Single Phase, Remote Thermostat, 240 Volt	
ESHVAC24000	24,000 BTU Cooling and 10 kw Heat Strip	310
ESHVAC31000	31,000 BTU Cooling and 10 kw Heat Strip	390
ESHVAC36600	36,600 BTU Cooling and 10 kw Heat Strip	380
ESHVAC42500	42,500 BTU Cooling and 10 kw Heat Strip	500
ESHVAC46500	46,500 BTU Cooling and 10 kw Heat Strip	510
AIR CONDITIONERS	& HEAT STRIPS: (Outside Wall Mounted, Three Phase, Remote Thermostat, 240 Volt)	
ESHVAC36600/1	36,600 BTU Cooling and 9 kw Heat Strip	380
ESHVAC42500/1 ESHVAC46500/1	42,500 BTU Cooling and 9 kw Heat Strip 46,500 BTU Cooling and 9 kw Heat Strip	500 510
ESHVAC40300/1	40,500 BIO COOTING and 5 km heat Settle	310
AIR CONDITIONERS	& HEAT STRIPS: (Outside Wall Mounted, Three Phase, Remote Thermostat, 480 Volt)	
ESHVAC36600/2	36,600 BTU Cooling and 9 kw Heat Strip	380
ESHVAC42500/2	42,500 BTU Cooling and 9 kw Heat Strip	500
ESHVAC46500/2	46,500 BTU Cooling and 9 kw Heat Strip	510
HEATERS:		
Heater Fan Forced	with Remote Thermostat	
ESHFFA	13,650 BTU, 4 kw, 240 Volt, Single Phase	24
ESHFFB	16,380 BTU, 4.8 kw, 240 Volt, Single Phase	24
Baseboard Heater v	with Remote Thermostat	
ESH48	48", 3,412 BTU, 240 Volt, Single Phase	14
ESH60	60", 4,265 BTU, 240 Volt, Single Phase	18
ESH72	72", 5,118 BTU, 240 Volt, Single Phase	21
ESH96	96", 6,824 BTU, 240 Volt, Single Phase	29
ESH120	120", 8,530 BTU, 240 Volt, Single Phase	35
AIR CONDITIONER &	HEATER ACCESSORIES:	
ESACC	Air Conditioner Controller for 2 HVAC Units (Cycles units and lets both	15
ESTAT	units operate, if needed)  Remote Mount Thermostat (For Through the Wall Air Conditioners)	2
		2
	Includes Fan, Motorized Louver, Remote Thermostat with Screened Exhaust Weather Hood and Metal Filter on Intake Weather Hood)	
ESEXH12	12" Exhaust (650 cfm)	32
ESEXH16	16" Exhaust (870 cfm)	39
ESEXH18	18" Exhaust (1,625 cfm), with 16" louver	50
ESEXH20	20" Exhaust (2,920 cfm)	54
ESTIMER	Recyle Timer (24 hour)	1
LOW LEAKAGE EXHAUS	ST SYSTEM:	
	rive Exhaust Fan with Bird Screen, Disconnect Switch, and Motorized Damper. Low Leakage aper with Insulated Parallel Blades, Blade Seals, Jamp Linkage and Barber Coleman Motor.)	
ESLOLEAKEXH/S	18" Motorized Intake Damper and Hood with Filter (964 cfm at 1/8" static pressure)	140
ESLOLEAKEXH/L	24" Intake Damper and Hood with Filter (2,236 cfm at 1/8" static pressure)	160
ALARMS: (Remote Ca	pability, Either Normally Opened or Normally Closed Contacts)	
ESALARMAC	High/Low Temperature Alarm (Consists of 2 Thermostats with 120V AC Dry Contacts)	3
ESALARMDC	High/Low Temperature Alarm (Consists of a 2 Pole Thermostat with 24V DC Dry	1
ESALARMHUM	Contacts) High/Low Humidity Alarm (Consists of 2 Humidistats 120V AC or 24V DC Dry Contacts)	4
ESSWITCH	Illegal Entry Switch (Consists of 24 Volt DC Dry Contact)	1/2
ESSMOKDET	Smoke Detector (Dry Contact)	. 1

NOTE: Shelter accessories cannot be supplied unless equipment shelter is purchased from UNR-Rohn.

Prices available upon request.

#### ROHN EQUIPMENT SHELTER ACCESSORIES

	EQUIPMENT SHELTER ACCESSORIES	
PART NUMBER	DESCRIPTION	WT.
ACCESSORIES:		
ESFIREX ESHALEX	Fire Extinguisher (5 lbs. All Purpose Dry Chemical) Fire Extinguisher (5 lbs. Halon 1211)	8 15
ESWRKBNCH	Work Bench with Drawer (30" Long x 72" Wide x 33-1/2" High)	60
LIGHTS:		
ESLIGHT ESLIGHT/100 ESLIGHT/300 ESFLLGT4 ESINLGT ESEMGLT	Exterior Light (500 Watt with Photocell) Exterior Light (100 Watt with Photocell, Tamperproof) Exterior Flood Light (300 Watt with Photocell) 48" Interior Fluorescent Light with 2 40 Watt Bulbs Incandescent Interior Light, 100 Watt Emergency Light (2 Head with Charger, Batteries Included)	14 10 15 7 5
WAVEGUIDE ENTRY PO	ORTS, ALUMINUM, WITH SEAL CAP:	
ESWGEP41 ESWGEP48 ESWGEP51 ESWGEP52 ESWGEP53 ESWGEP54 ESWGEP56	4" 1 Port 4" 4 Port 4" 8 Port 5" 1 Port 5" 2 Port 5" 3 Port 5" 4 Port 5" 6 Port	3/4 4-1/4 6-1/4 4/5 3-1/2 4-4/5 4-4/5
ENTRY PORTS:	25 DVG with Dive	0.7/0
ESWGE2 ESWGE3 ESWGE4 ESWGE6	2" PVC with Plug 3" PVC with Plug 4" PVC with Plug 6" PVC with Plug	2-1/2 3-3/4 5-1/2 7-1/4
CABLE TRAYS:		
ESCBLTRY12 ESCBLTRY18 ESCBLTRY24	12" Aluminum Cable Tray (Ladder) with Supports (12 Feet Long) 18" Aluminum Cable Tray (Ladder) with Supports (12 Feet Long) 24" Aluminum Cable Tray (Ladder) with Supports (12 Feet Long)	35 37 39
FITTINGS FOR CABLE	E TRAYS: (Includes Tee, Elbow, Inside Elbow, Cross, Etc.)	
ESCTF12 ESCTF18 ESCTF24	12" Fittings with a 24" Radius 18" Fittings with a 24" Radius 24" Fittings with a 24" Radius	18-1/2 20-3/4 23-1/4
HALON SYSTEMS:		
	oss Zone Detectors, Manual Discharge Switch, Abort Switch, Horn, Bell, Strobe Ligh or Battery Backup (No Reserve Capacity)	nt, Control
ESAUTOHALON/45	45# Automatic Halon System (Will cover 2,184 cu. ft. at 5% concentration; 1,807 cu. ft. at 6% concentration; and 1,530 cu. ft. at 7% concentration)	180
ESAUTOHALON/85	85# Automatic Halon System (Will cover 4,126 cu. ft. at 5% concentration; 3,413 cu. ft. at 6% concentration; and 2,891 cu. ft. at 7% concentration)	285
INTERIOR PANELING	(OPTION)	
ESGLBD48 ESGLBD410	Glassboard Paneling with Molding (4' x 8' x 3/8") Glassboard Paneling with Molding (4' x 10' x 3/8")	50 62-1/2
INTERIOR WALL PART	LITION WITH 3' INSIDE SLIDING DOOR:	
ESIW88 ESIW89 ESIW810	Framing, Paneling, and Door (8' wide x 8' high) Framing, Paneling, and Door (8' wide x 9' high) Framing, Paneling, and Door (8' wide x 10' high)	144 172 190
ESIW108 ESIW109 ESIW1010	Framing, Paneling, and Door (10' wide x 8' high) Framing, Paneling, and Door (10' wide x 9' high) Framing, Paneling, and Door (10' wide x 10' high)	190 213 235
ESIW128 ESIW129 ESIW1210	Framing, Paneling, and Door (12' wide x 8' high) Framing, Paneling, and Door (12' wide x 9' high) Framing, Paneling, and Door (12' wide x 10' high)	226 253 280
170 mm	The second secon	

NOTE: Shelter accessories cannot be supplied unless equipment shelter is purchased from UNR-Rohn.

(Replaces D-2271)

#### EQUIPMENT SHELTER ACCESSORIES

PART NUMBER	DESCRIPTION	WT.
EXTERIOR AND I	INTERIOR DOORS:	
ESP3	3'0" x 7'0" Reinforced Insulated Aluminum Door, Mill Finish, with 3 Point Locking System	106
ESP147	3'6" x 7'0" Reinforced Insulated Aluminum Door, Mill Finish, with 3 Point Locking System	130
ESP32	3'6" x 8'0" Reinforced Insulated Aluminum Door, Mill Finish, with 3 Point Locking System	141
ESSDR	3'0" x 7'0" Aluminum Frame Steel Skin Door with Dead Bolt and Industrial Lock Set	83
ESID	3'0" x 6'8" Interior Sliding Door, Hollow Wood with Handle	55
DUMBRIAN BYILL	(ADDITON)	

EXTERIOR FINISHES: (OPTION)

Exterior Aggregate Siding Finish - 1/16" chopped fiberglass with tan pebble rock finish (+/- 1/2" total thickness) attached to outside of shelter

ESSIDING 1-1/2/Sq. Ft.

<u>Bullet Resistant Material</u> - Specially developed woven-roving fiberglass material laminated with a thermoset resin to be attached to exterior of shelter. The bullet resistant material meets government specifications. Available in the following resistance:

ESBULRESM	.44 magnum	3-1/4/Sq. Ft.
ESBULRESS	.30 carbine and 12 gauge shotgun slug	5-1/4/Sq. Ft.
ESBULRESR	30.06 rifle, 7.62 mm nato ball and .223 rifle.	11-1/4/Sq. Ft.

#### GUTTERS AND DOWNSPOUTS:

Aluminum Gutters with 4 Downspouts, Splash Blocks, and Mounting Hardware Installed on Equipment Shelter. Colors Available: Brown, Black, White, Gray, Green, Gold, Creme, Ivory

ESGUTTER/SMALL For 12' x 18' x 10' high or smaller shelters

ESGUTTER/LARGE For 12' x 20' x 10' high to 12' x 30' x 10' high shelters

ICE SHIELDS: (Galvanized Grip Strut, Roof Mounted, 4° Clearance, Rubber Anti-Shock Mounts)

ESIS88GS	For 8' x 8' Shelter	320
ESIS810GS	For 8' x 10' Shelter	400
ESIS812GS	For 8' x 12' Shelter	480
ESIS814GS	For 8' x 14' Shelter	500
ESIS816GS	For 8' x 16' Shelter	640
ESIS818GS	For 8' x 18' Shelter	720
ESIS820GS	For 8' x 20' Shelter	800
ESIS1010GS	For 10' x 10' Shelter	500
ESIS1012GS	For 10' x 12' Shelter	600
ESIS1014GS	For 10' x 14' Shelter	700
ESIS1016GS	For 10' x 16' Shelter	800
ESIS1018GS	For 10' x 18' Shelter	900
ESIS1020GS	For 10' x 20' Shelter	1000
ESIS1212GS	For 12' x 12' Shelter	720
ESIS1214GS	For 12' x 14' Shelter	840
ESIS1216GS	For 12' x 16' Shelter	960
ESIS1218GS	For 12' x 18' Shelter	1080
ESIS1220GS	For 12' x 20' Shelter	1200
		1200

#### GENERATORS WITH AUTOMATIC TRANSFER SWITCH:

- a) Generator with LPG Gas Engine, Controller, Block Heater, Battery Charger, Rack and Battery, Secondary LPG Regulator, Vibration Mounts and Circuit Breaker.
- b) Automatic Transfer Switch with Adjustable Time Delays for Power Outages and Return to Utility Power, Engine Cool Down Timer, Exerciser, Phase Sensing Relays and Test Mode Capabilities.
- c) Complete Installation and Checkout Including Exhaust Piping with Thimble, Wiring, LPG Piping through Wall with 1/2" Female Connection, Air Intake Louver, Transition Piece and Weather Hood.

ESGEN10	10 KW Generator with 100 A,	Single Phase Automatic Transfer Switch	1070
ESGEN10/3	(Same as above) with Three	Phase Automatic Transfer Switch	1070
ESGEN15	15 KW Generator with 100 A,	Single Phase Automatic Transfer Switch	1070
ESGEN15/3	(Same as above) with Three	Phase Automatic Transfer Switch	1070
ESGEN20	20 KW Generator with 100 A,	Single Phase Automatic Transfer Switch	1085
ESGEN20/3	(Same as above) with Three	Phase Automatic Transfer Switch	1085
ESGEN25	25 KW Generator with 150 A,	Single Phase Automatic Transfer Switch	1120
ESGEN25/3	(Same as above) with 100 A,	Three Phase Automatic Transfer Switch	1120
ESGEN30	30 KW Generator with 150 A,	Single Phase Automatic Transfer Switch	1170
ESGEN30/3	(Same as above) with 100 A,	Three Phase Automatic Transfer Switch	1170
ESGEN36	36 KW Generator with 200 A,	Single Phase Automatic Transfer Switch	1435
ESGEN36/3	(Same as above) with 150 A,	Three Phase Automatic Transfer Switch	1370
ESGEN50	50 KW Generator with 225 A,	Single Phase Automatic Transfer Switch	1935
ESGEN50/3	(Same as above) with 175 A,	Three Phase Automatic Transfer Switch	1900

NOTE: Shelter accessories cannot be supplied unless equipment shelter is purchased from UNR-Rohn.

#### Prices available upon request.

#### GENERAL SPECIFICATIONS FOR STANDARD ROHN EQUIPMENT SHELTERS

#### 1.0 Scope

The specifications contained herein encompass the labor, equipment, and materials for the fabrication of a transportable, prefabricated equipment shelter.

The shelter shall be designed for the explicit use of housing electronic equipment, measuring devices and related components, within a controlled atmosphere required for the proper operating conditions for the equipment.

#### 2.0 General

#### 2.1 Shelter Type

The shelter shall be preassembled and fiberglass coated.

#### 2.2 Shelter Size

Size and dimensions shall be specified per the following:

Width and length shall be to outside of finished walls. Width is either  $8'\ 0"$ ,  $10'\ 0"$ , or  $12'\ 0"$ . Length shall be from  $6'\ 0"$  to  $30'\ 0"$ , as specified by customer, in 2' increments.

Height shall be 8' 0" from finished floor to finished ceiling measured inside. Other interior heights available to customer specifications.

Variations to standard sizes may necessitate a price and/or delivery adjustment.

#### 2.3 Operating Environment and Control

The shelter shall be dust proof, air tight, and watertight.

The optimum operating range of the equipment to be installed shall be assumed to be 78 degrees F. (25.6 degrees C.) unless otherwise specified by the Purchaser. The heating and cooling requirements for a shelter shall be based upon the outside ambient temperatures and equipment operating heat output specified by the Purchaser.

#### 3.0 Structural

#### 3.1 Skid

Two (2) full lengths of 6" steel structural channel (8.2 lbs. per ft.) extending approximately 6" beyond the ends of the shelter with lift eyes in each end of the channel with two (2) or more cross braces of 3" pipe, maximum spacing 84".

Skid components, including hardware, shall be hot dip galvanized after fabrication.

Skid shall be attached to the shelter with 1/2" x 5" lag bolts.

#### 3.2 Floor Section

The floor shall be of sandwich fabrication with  $4 \times 4$  wood joists spaced at 16" on center. Voids between joists shall be filled with 3-1/2" thick fiberglass insulation with vapor shield (R value = 11). Shelter shall be laminated on both sides (see drawing) with 3/4" exterior A/C grade plywood (smooth face out) or waferboard.

The exterior surface shall be covered with 1/8" of polyester/fiberglass composite with a 15 mil minimum thickness gelcoat polyester enamel.

The interior surface shall be covered with a  $1/8" \times 12" \times 12"$  square vinyl floor covering, bonded with a waterproof contact adhesive.

#### 3.3 Wall Sections

The frame shall consist of a 2 x 4 wood box frame with 2 x 4 studs spaced 16" on center. Voids between studs shall be filled with 3-1/2" fiberglass insulation with a vapor shield (R value = 11).

The exterior shall be covered with 3/8" exterior grade waferboard.

The interior shall be covered with 1/4" light colored wood paneling with moldings on corners. Floor/wall intersections shall be finished with 4" vinyl baseboard.

#### 3.4 Ceiling

The shelter ceiling shall be 3/8" wood substrate textured white with moldings on corners.

#### 3.5 Roof Section

The roof section shall be constructed of 2 x 6 or heavier rafters at 16" on center and sloped at 1/2" per foot minimum from the center. Void areas between rafters shall be filled with 6" thick fiberglass insulation with a vapor shield (R value = 19). The exterior shall consist of 1/2" minimum exterior grade waferboard.

#### 3.6 Finish

The entire exterior of the shelter shall be thoroughly coated with 1/8" of polyester resin and chopped fiberglass composite (1/4" thick on roof). Resin shall be pigmented tan and stabilized for ultraviolet protection. Final finish shall consist of 15 mil minimum gelcoat polyester enamel with tan pigment and ultraviolet stabilizers. Colors other than tan are available at an additional cost.

Openings shall be fiberglassed to the interior of the shelter. Corners shall be rounded and voids shall be filled with polyester compound and sanded prior to fiberglassing to avoid delamination.

#### 3.7 Door

The shelter shall have one (1) prehung, gasket sealed, insulated, 3' wide by 7' high, aluminum frame galvanized steel door with white baked enamel finish; door check; door stop; keyed lock set and dead bolt, keyed alike.

#### 4.0 Thermal

Insulation shall be non-combustible fiberglass bat with vapor barrier in accordance with ASTM E-136. Insulation shall conform to the performance requirements of Federal Specifications HH-1-52F and  $DO\,ERCS$ . Wall and floor thickness shall be 3-1/2" (R11 Rating). Roof thickness shall be 6" (R19 Rating).

#### 5.0 Electrical

Electrical installation and wiring shall conform to the latest edition of the National Electric Code and shall consist of the following as a minimum: Surface mounted, EMT conduit. Grounded, duplex outlets, one (1) every 4' on three walls standard. Fluorescent lights (two bulb fixtures) with inside switch. 100 amp 120/240 vac main, 20 position breaker box (grounded to skid) with 12 single pole 20 amp breakers.

(Note: 230 volt, 50 cycle with incandescent lights available upon request.)

#### 6.0 Design Loading

6.1 Shelter shall be designed for the following loading:

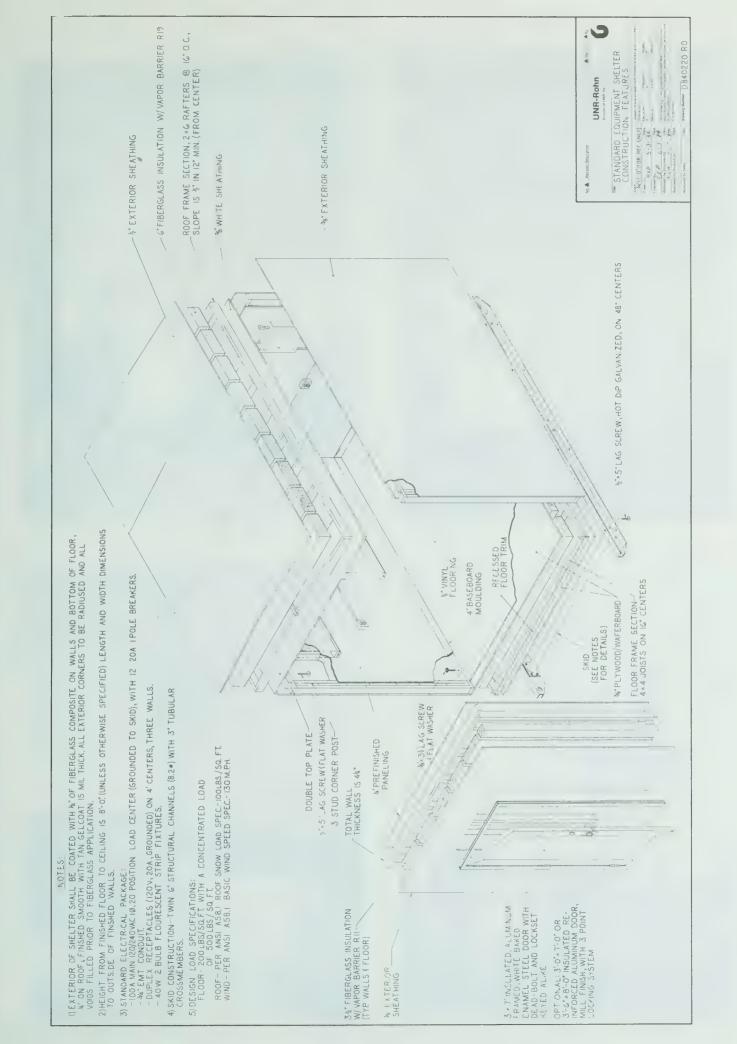
Floor - Per ANSI A.58.1 Uniform Distributed Load - 200 lbs. per square foot
Per ANSI A.58.1 Concentrated Load - 500 lbs. per square foot
Roof - Per ANSI A.58.1 Roof Snow Load Specification - 100 lbs. per square foot
Wind - Per ANSI A.58.1 Basic Wind Speed Specification - 130 MPH

#### 7.0 Additional Provisions

- 7.1 Special Designs and Options Available Upon Request.
- 7.2 Totally Engineered "Turn Key" Systems Available Upon Request.
- 7.3 Items extending beyond the shelter that will exceed legal shipping widths and/or heights, including air conditioners, hoods, etc., shall be prefitted and packed inside the shelter for shipment. These items shall be installed in the field by others unless otherwise indicated.
- 7.4 Rohn's liability on products purchased and installed in shelters will not exceed the limit of the warranty provided by the product manufacturer.
- 7.5 Shelters are F.O.B. Birmingham, Alabama. Delivery costs are based on normal accessible installation sites. Special handling equipment (i.e. helicopter, crane, etc.) or special local permits or requirements are not included in delivery cost. Off loading of shelters from shipping equipment is the responsibility of others unless otherwise stated in the proposal.
- 7.6 Freight quotes are firm for 30 days. Additional mileage charges will be invoiced when site location is farther than Purchaser specified location. Promised delivery date for oversized shelters that require special trailers will be subject to availability of equipment from freight company. Purchaser shall be responsible for additional charges when an alternate freight company is specified by the Purchaser.
- 7.7 Quotes for source inspection and individual state approval are available upon request.

#### By: Rohn

6718 West Plank Road (61604) P. 0. Box 2000 Peoria, IL, USA 61656 Ph. 309-697-4400 TWX: 910-652-0646 FAX: 309-697-5612

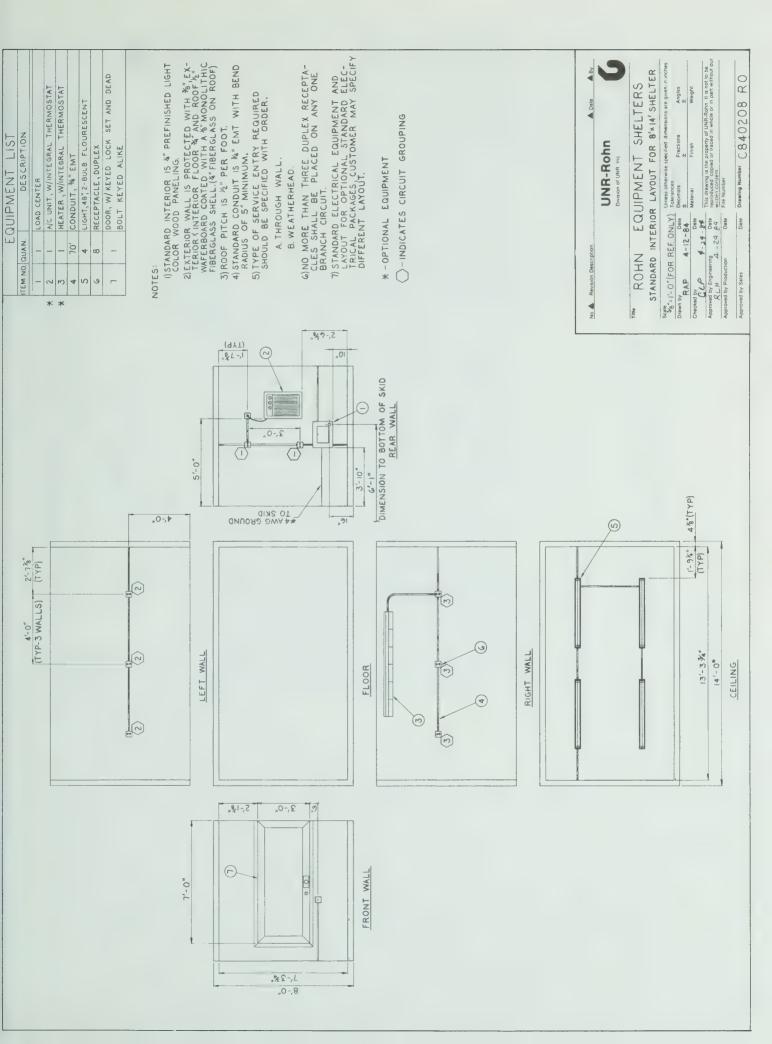


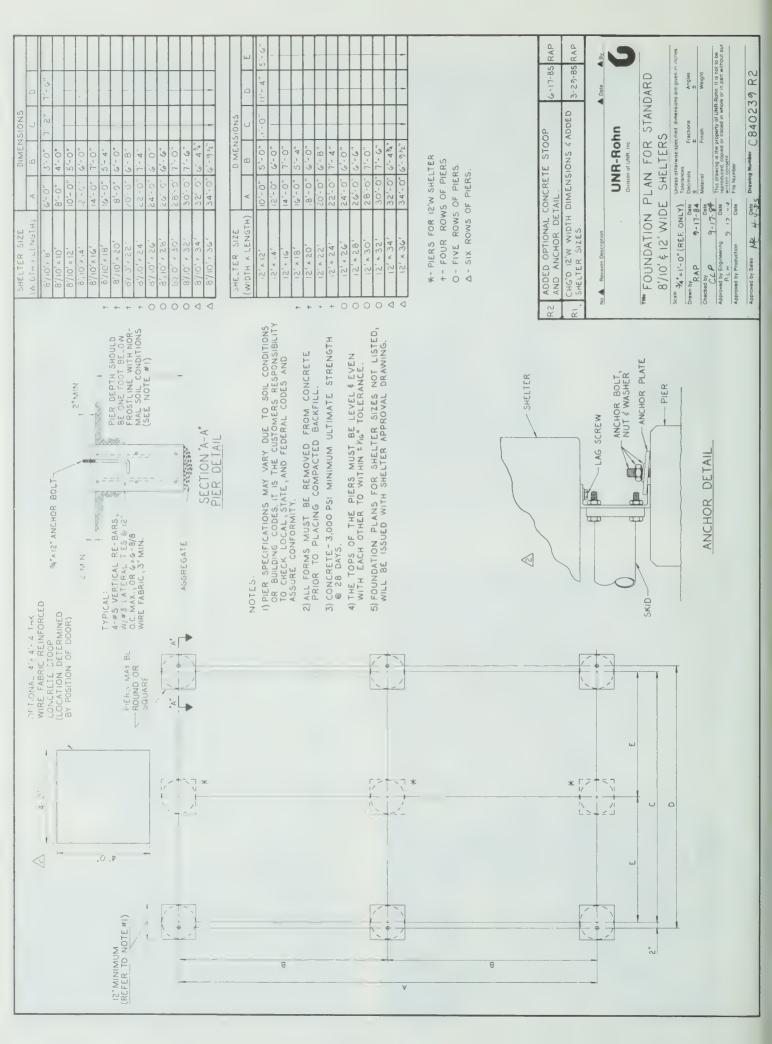












Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

## All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

### All antenna installations must be grounded per local and national codes.

The mixing of so-called interchangeable copies of ROHN products is dangerous and voids all engineering or warranty data supplied by ROHN. Materials used by the so-called copies are not the same quality and have not been tested or engineered by ROHN to conform to the same quality standards. Mixing of non-ROHN items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

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# ROHN-LOC

# SAFETY CLINBING CLINBING CDEVICES

with special unique features

that offer more advantages than any other fall prevention device!

# Check for Gourself... ROHN-LOC\*SAFETY

TOP SAFETY **CABLE** BRACKET

### **Have Outstanding Simplicity**

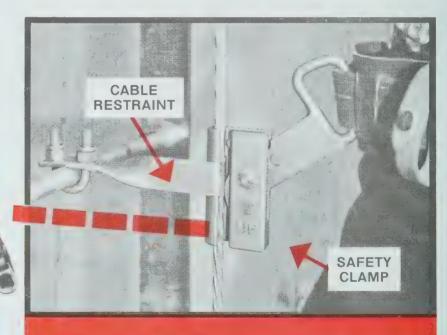
ROHN-LOC is a new, modern-design safety device that best solves the need for a fool-proof, always-available safety device for climbers of ladder or step-bolt equipped structures of all kinds.

#### HOW IT WORKS:

The top safety cable bracket is attached to the top most part of the structure with the bottom safety cable bracket at the very bottom, which firmly secures a 36" steel cable. The workman then puts on the ROHN-LOC Safety Belt with the permanently attached Safety Clamp. He is now able to safely climb the entire length of the cable, securely anchored to it to prevent injury if he should slip or fall. With the ROHN-LOC, he is instantly gripped and secured without any free-fall whatsoever, unlike some other devices.

There are cable restraints attached through the cable, then mounted onto the ladder (or structure) at appropriate distances along the cable to keep it rigid, even in a high wind.

The top safety cable bracket further serves as a climbing extension with permanently attached hand grips for workman to use in moving onto a platform or away from the ladder itself.



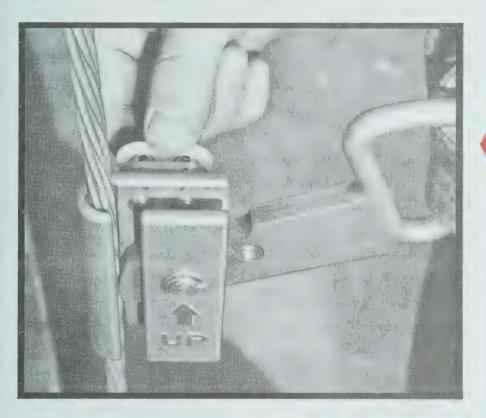
BOTTOM SAFETY CABLE BRACKET

> Note attachment of the Safety Clamp securely to the steel cable and how the Safety Clamp slides easily and readily through the cable restraints. Safety Clamp cannot be separated from the cable without pulling the double-lock (see next photo). Also, there is no disassembly of Safety Clamp in any manner if workman wishes to move from one cable and attach onto another. Note also that the Safety Clamp is permanently anchored to the Safety Belt.

# CLIMBING DEVICES

SPECIFICATIONS
STANDATIONS

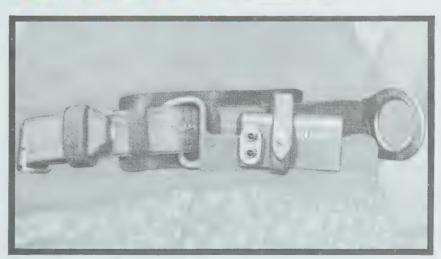
Fool-proof Design!



Note the double-lock that activates the Safety Clamp. Once locked in position for use, the Clamp cannot be removed or come off the %" steel cable. Carefully note the positive gripping action of the Clamp against the cable. This means instant security for the workman should anything happen. When Safety Clamp is not in use, the lock holds it in a folded position out of the way on the Safety Belt.

# the **SAFETY** Belt

The heavy duty Safety Belt is a combination 134" woven nylon web, mildewresistant belt with elk-tanned leather. Available with added nylon cushion pad for back support, if desired. Nylon webbed belt meets U. S. Government specifications and the existing and proposed ANSI Standards and OSHA requirements. Belt holds workman always in an upright position should he even lose consciousness. Small leather tie-belt with strong snap fastener keeps Safety Clamp securely in place and completely out of the way when not in use . . . yet is available for instant use at all times when needed. Standard "D" ring encircles nylon belt for secure attachment . . . yet is removable, if desired.



ROHN-LOC is just what the industry demands . . . simple, fool-proof design with every desired feature, for complete safety. Instructions must be noted precisely to insure safe use.

# Check these Features

AND SPECIFICATIONS

of the NEW

# ROHN-LOC

# FLVR **DEVICES**



Safety Clamp slides pass cable restraints easily; never has to be removed while working along entire length of cable.



Safety Clamp attaches to steel cable by merely pulling the locking-pins, which allow unit to open and be attached to the cable. When pin is locked, workman is secured to the cable, all without any disassembly or use of tools of any kind. Safety Clamp can be moved from cable to cable without taking anything apart whatsoever.



Safety Clamp is "X-rayed" to insure against material defects and carefully checked before shipment.



Safety Clamp completely made of No. 303 stainless steel.



Gripping action of Safety Clamp is such that it securely grips in spite of grease, water or ice on the cable.



The Safety Clamp is always available and ready for use when the Safety Belt is on; saves time, adds efficiency, and makes for easy "hook-up" at all times.



Cable restraints hold line steady even in heavy wind; bottom safety cable bracket designed to keep cable taut with passage of time.

UNR-Rohn recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers

All towers and masts should be installed and dismantled by experienced and trained

All antenna installations must be grounded per local or national codes.



Top and bottom safety cable brackets are completely hot dip galvanized.



ROHN-LOC Safety Devices can be installed on any structure under construction or already built and can be used to any height and practically every type structure in existence.



Adaptors available for use on tubular or angle tower legs, fixed ladders, stepbolts, steel and wood poles, bridges, water towers, tanks, etc.

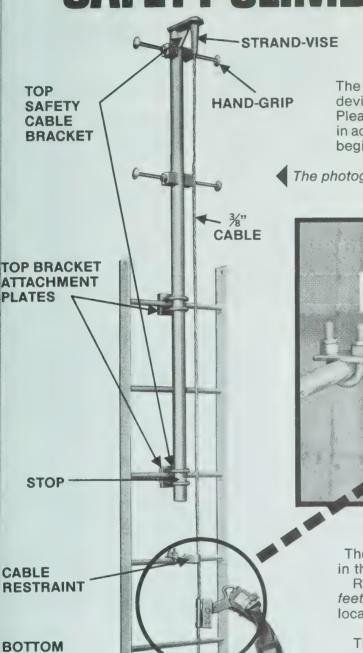


TO ORDER SEE CATALOG FOR PART NUMBERS -GIVE HEIGHT REQUIRED AND TYPE OF STRUCTURE.



**ASSEMBLY INSTRUCTIONS AND PARTS FOR** 

# ROHN-LOC SAFETY CLIMBING DEVICES



SAFETY

**BRACKET** 

BOTTOM

BRACKET

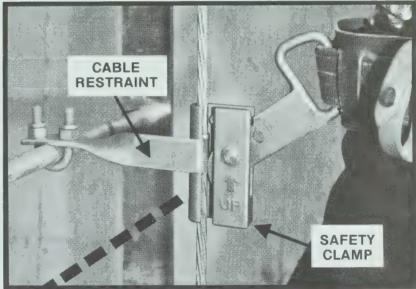
**PLATES** 

**ATTACHMENT** 

CABLE

The ROHN-LOC Safety Climbing Device is a life saving device. It's effectiveness depends on proper installation. Please take time to study these instructions and determine in advance just how each piece will be put in place before beginning.

The photograph shown here is a typical installation:



#### CABLE RESTRAINTS-

The cable restraint is intended to keep the cable steady in the wind.

Recommended spacing is approximately *every 20* feet but not over 30 feet. A cable restraint should also be located at any point where the slope of the cable changes.

The restraint must be slid on the cable so that the cable is to the right of the arm. Masking tape can be used to keep the restraint in position on the cable while the cable is being installed.

OSHA
SPECIFICATIONS
AND

**STANDARDS** 

COMPRESSION SPRINGS

STRAND-VISE

CABLE

Patent No. 3,908,791

### ROHN-LOC

#### SAFETY CLIMBING DEVICES

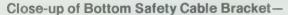
**INSTRUCTIONS & PARTS ASSEMBLY CONTINUED:** 

#### Close-up of Top Safety Cable Bracket & Attachment Plates-

The top safety cable bracket should be installed at the top of the climbing facility, as shown in the photographs.

For greatest strength, it is suggested that the top and third ladder rung be used to secure the bracket. Ladder must be of sufficient strength to maintain safety cable and bracket. It is advisable to carefully inspect the ladder rungs to be sure they will adequately support the top bracket. When installing, sufficient bracket should protrude above climbing facility to allow climber to maneuver.

Note installation of attachment plates.

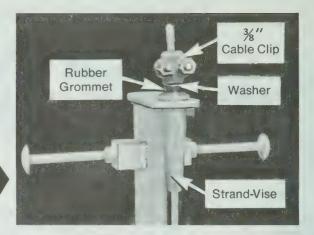


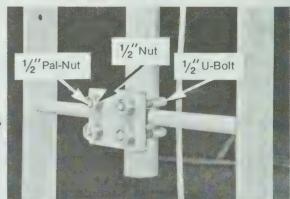
The bottom safety cable bracket should be located on the last two rungs of the ladder.

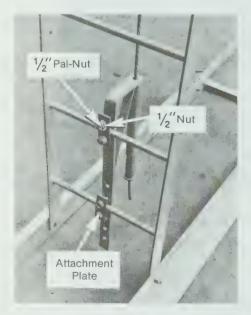
It is used to secure the cable at the bottom of the ladder and also to keep the cable in tension.

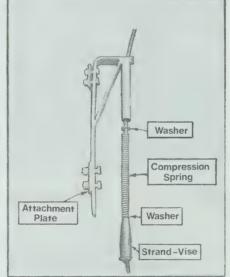
Assemble the parts as shown on the exploded photograph of the assembly.

Apply final and full tension by tilting the bracket at an angle and pushing the bracket against the bottom rung. For proper tension, the spring should be even with the tip of the tube of the bracket. (note photo)











#### CABLE-

Cable should be uncoiled as illustrated. "kinks" in the cable will make climbing difficult, if not impossible. Also, the cable must be straight for sliding into the cable restraints.

**NOTE:** The entire safety climbing system must be periodically inspected and properly maintained, minimum once yearly.





#### ROHN-LOC SAFETY CLIMBING DEVICES

(For Use with Step Bolts or Leg or Face Mounted Ladder)

	NUMBER OF			NUMBER OF	
PART NO.	RESTRAINERS	WT.	PART NO.	RESTRAINERS	WT.
			RL310	15	343
RL020	0	106	RL320	15	346
RL030	1	119	RL330	16	359
RL040	1	122	RL340	16	362
RL050	2	135	RL350	17	375
	_		2.2330	4.7	373
RL060	2	138	RL360	17	378
RL070	3	151	RL370	18	391
RL080	3	154	RL380	18	394
RL090	4	170	RL390	19	407
RL100	4	173	RL400	19	410
RL110	5	183	RL410	20	423
RL120	5	186	RL420	20	426
RL130	6	199	RL430	21	449
RL140	6	202	RL440	21	452
RL150	7	215	RL450	22	455
RL160	7	218	RL460	22	458
RL170	8	231	RL470	23	471
RL180	8	234	RL480	23	474
RL190	9	247	RL490	24	483
RL200	9	250	RL500	24	490
RL210	10	263	RL510	25	503
RL220	10	266	RL520	25	506
RL230	11	279	RL530	26	519
RL240	11	282	RL540	26	522
RL250	12	295	RL550	27	529
RL260	12	298	RL560	27	532
RL270	13	321	RL570	28	561
RL280	13	324	RL580	28	564
RL290	14	327	RL590	29	567
RL300	14	330	RL600	29	570
1121000			11000	2,7	570

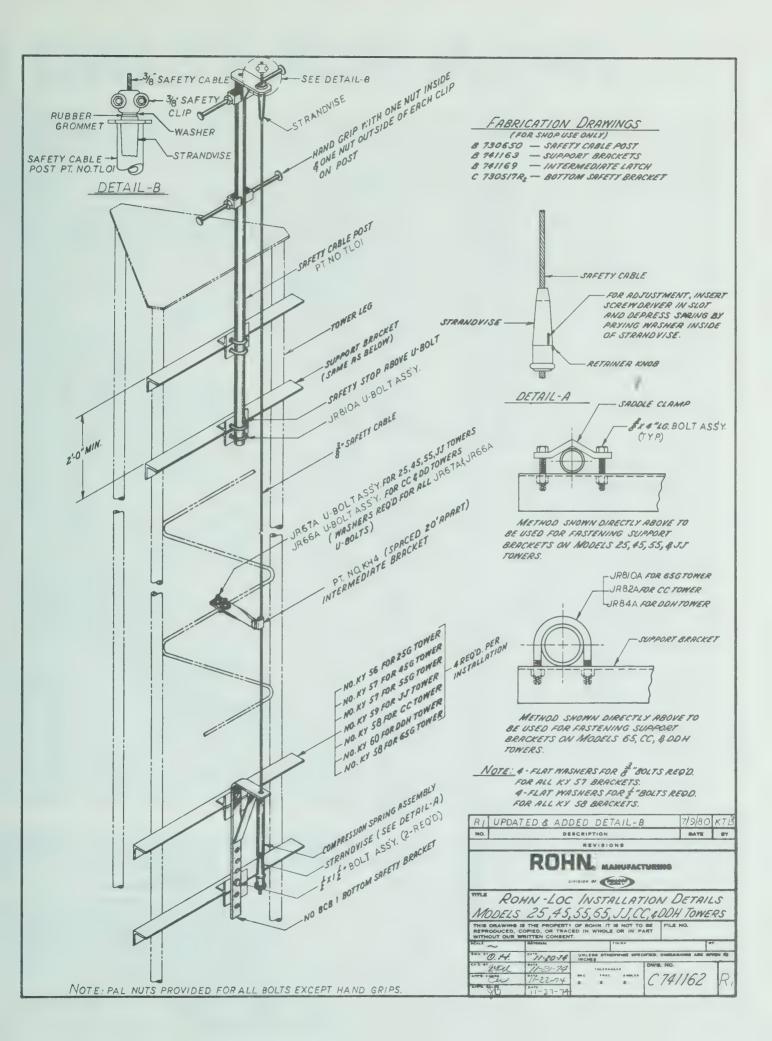
Complete kit includes one belt, one clamp, necessary restrainers, top and bottom attachment, correct amount of 3/8" cable to reach the top of the ladder, and necessary nuts, bolts and U-bolts. Individual part numbers are as follows:

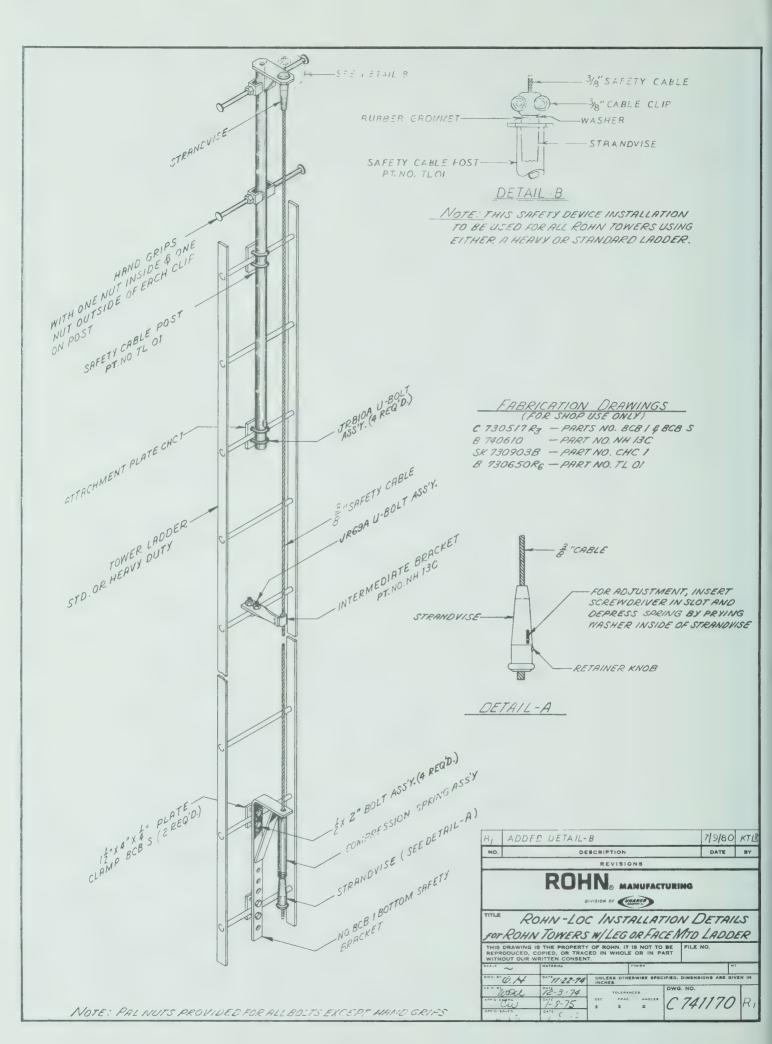
RLB**	Rohn-Loc Belt (Includes Belt, D-Ring and Clamp Pad)	2
RLSC	Rohn-Loc Safety Clamp	3
RLBSC**	Rohn-Loc Belt and Safety Clamp	5
RLBBL	Rohn-Loc Bottom Bracket (for use w/ladder attachment)	8
RLBBA *	Rohn-Loc Bottom Bracket (for use w/step bolts)	
RLTBL	Rohn-Loc Top Bracket (for use w/ladder attachment)	23
RLTBA *	Rohn-Loc Top Bracket (for use w/step bolts)	
RLTPA *	Rohn-Loc Top Post (for use w/step bolts)	20
RLFPA *	Rohn-Loc Filler Plates (for use w/step bolts)	
RLC (3/8EHS)	Rohn-Loc 3/8" EHS Safety Cable	273/MFT
RLC5/16	Rohn-Loc 5/16" Stainless Steel Safety Cable	210/MFT
RLR_*	Rohn-Loc Cable Restrainer (for use w/ladder attachment)	2
RLCRA *	Rohn-Loc Cable Restrainer (for use w/step bolts)	1

<sup>\*</sup> Specify tower model no. (25, 45, 55, 65, C, J) or section/pipe size

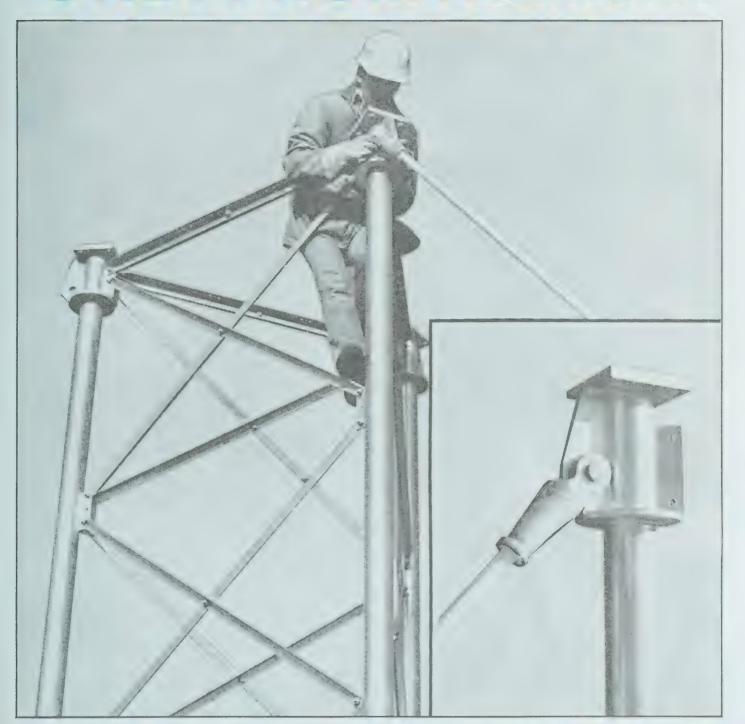
<sup>\*\*</sup> Specify size (waist size) - S (32/40), M (36/44), L (40/48)







# ONLY FROM ROHN...



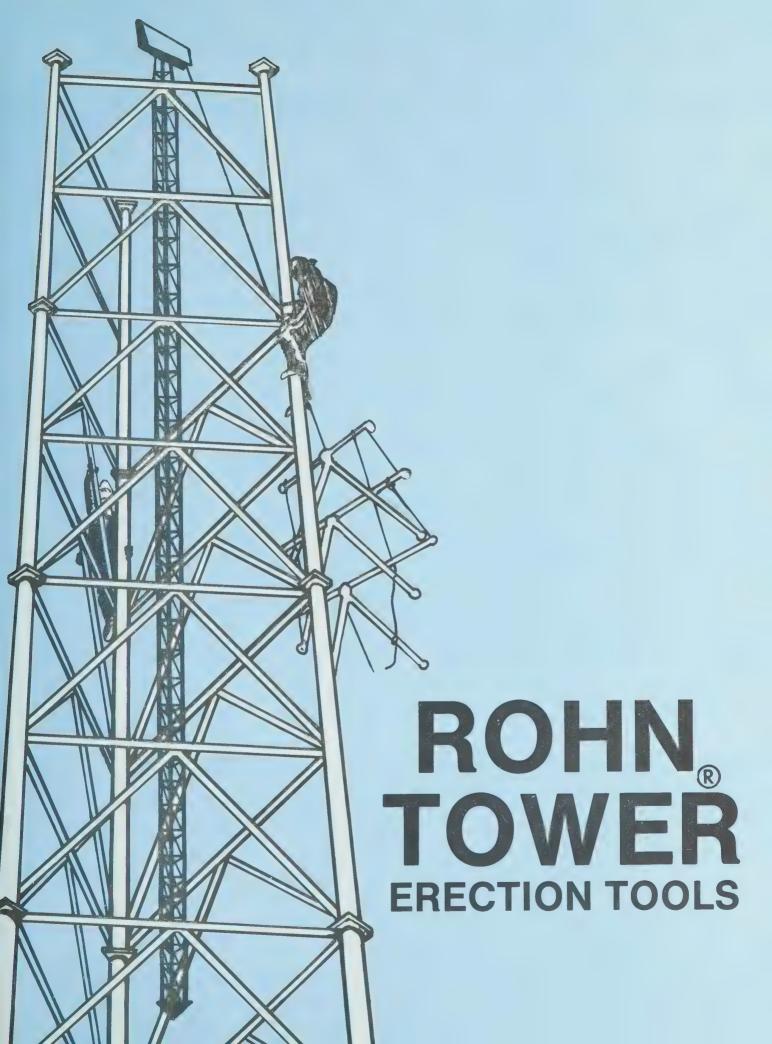
### 24'-80,000 POUND GUY INSULATORS

The new 24 foot, 80,000 pound ultimate strength guy line insulator from ROHN is ideal for applications requiring high mechanical loads, such as FM installations needing insulated (invisible) guy wires near the antenna

The reliable high strength fiberglass rods are equipped with galvanized end fittings, proof tested after manufacture and assembly, and shipped in single 24 foot lengths.

More information is available from ROHN, 6718 W. Plank Road, P.O. Box 2000, Peoria, IL 61656, Phone: 309-697-4400, TWX: 910-652-0646, FAX: 309-697-5612





# ROHN. TOWER ERECTION TOOLS

UNR-Rohn, Division of UNR, Inc., headquartered in Peoria, Illinois U.S.A., serves the expanding world of communications as a major manufacturer of towers for broadcast and microwave transmission. Contained in the following pages are examples of Quality tools available from Rohn. These tools are commonly used for tower erection and service.

### **ADJUSTABLE WRENCHES**

Drop-forged alloy steel and heat treated for toughness and durability.

ETCRTW10 10" ETCRTW12 12" ETCRTW18 18"

### STRAIGHT PIPE WRENCHES

Comfort grip, malleable iron I-beam handle with convenient hang-up hole.

Openina

ETHDPW10 10" ETHDPW12 12"

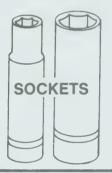
Lenath

### **CONSTRUCTION WRENCHES**

Drop-forged from select alloy steel to withstand high leverage and heavy loads with drifting and aligning handle.

ETCTW7/8	1/2"	7/8"	12"
	1/2	1/0	12
ETCTW11/16	5/8"	1-1/16"	14-3/4"
ETCTW11/4	3/4"	1-1/4"	17"
ETCTW17/16	7/8"	1-7/16"	17-5/16"
ETCTW15/8	1"	1-5/8"	17-11/16"

**Bolt Size** 



### 3/8" Drive, Deep Set

ETDS7/1638 7/16" ETDS1/238 1/2" ETDS9/1638 9/16" ETDS5/838 5/8" ETDS11/1638 11/16" ETDS3/438 3/4" ETDS13/1638 13/16" ETDS7/838 7/8"

### 1/2" Drive, Deep Set

7/16" ETDS7/1612 ETDS1/212 1/2" ETDS9/1612 9/16" ETDS11/1612 11/16" ETDS13/1612 13/16" 7/8" ETDS7/812 ETDS15/1612 15/16" ETDS1&1/1612 1-1/16"

### 3/4" Drive, Deep Set

ETDS11/434 1-1/4" ETDS15/1634 1-5/16" ETDS17/1634 1-7/16" ETDS11/234 1-1/2" ETDS15/834 1/5/8"

### REVERSIBLE RATCHET HANDLES

ETRRH738 7", 3/8" drive ETRRH1012 10", 1/2" drive ETRRH1512 15", 1/2" drive ETRRH1934 19", 3/4" drive



ETDS11/812

### **SOCKET ADAPTERS**

ETSADAP38/12 ETSADAP12/38 ETSADAP12/34 ETSADAP34/12

1-1/8"

Converts 3/8" to 1/2" Converts 1/2" to 3/8" Converts 1/2" to 3/4" Converts 3/4" to 1/2"



### **COMBINATION WRENCH SET**

5 Pieces ETCWSET 1/2", 9/16", 5/8", 3/4", 7/8" Openings

4' long



ETLPW10 10" straight jaws

### **LEVEL**

One piece extruded magnesium extra strength I-beam construction. Hang up Hole at one end. Levels in three positions.

PROTRACTOR PLUMB & LEVEL

For installing guy anchors at proper slope.



ETGAL

Light Blade, Cabinet Tip

Square Blade, Standard Tip

### **HACK SAW**

Adjustable for 8" to 12" blades. Nickel plated steel frame. Furnished with 10" blade. Depth of cut - 3-1/4".

ETHS10 ETHSB10 Hack Saw

Set of 10 Blades (10")



### STEEL TAPE

Metric and English. Chrome plated with an epoxy coating to protect bold black markings.

ETST15M/50

50' or 15 meters

### SCREWDRIVERS

ETSD3/16

ETSD5/16

Alloy steel blades with plated finish.

Blade

Length

Diameter

Overall

Length

9-1/16"

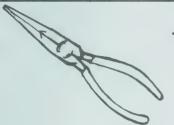
3/16"

5/16" 10" CHANNELOCK PLIERS

Forged from high grade steel with polished steel finish.

12"

ETCHP12



### **THIN NOSE PLIERS**

**ETTNP** 

### SIDE CUTTERS

Forged from high grade steel with polished steel finish.

ETSC8

8" long

### WIRE STRIPPERS

Shears bolts clean, cuts wire, strips wire, measures stud sizes, gauges wire sizes, crips terminals.

ETWS1000

7-1/2" long

### **TIN SNIPS**

Drop forged steel with polished jaws.

ETTS10



### **BOLT/CENTER CUTTERS**

Hard metal cutter with a swing-away keeper recommended for cutting galvanized steel strand guy wire up to 1/2".

ETCCC1/2

### **BALL PIEN HAMMER**

Hickory handle 40 oz.

ETHAM40

16" Overall Length

### **DOUBLE FACE SLEDGE HAMMER**

Handle length - 32". Face - 2-1/4". Weight - 8 lbs.

ETDFS8



Forged from hexagon steel, hardened and tempered. To stand up under severe conditions.

	Point	Stock	Length
ETLUP3/16	3/16"	1/2"	10"
ETLUP1/4	1/4"	3/4"	15"

**BULL PIN** Made of alloy steel.

ETBP3/8

15" long

FILES ETFILE ETFILER

Rasp, half round 1/2" dia. round, 12" long

### **CANVAS BUCKET**

Made of No. 1 canvas with cycolac top ring. Bottom is reinforced leather.

**ETCBKT** 

17" high



**BELT BOLT BAG** 

Made of water repellent canvas.

ETBAG

10" × 11"





### SAFETY STRAP

Made of high tenacity continuous filament nylon fabric. Thoroughly impregnated with neoprene to provide the desired flexibility with maximum strenath.

**ETSTRAP** 

### **TOOL AND SAFETY BELT**

Waist strap is 1-3/4" wide and is made of 6 ply nylon. ETTSBS

20" (\*)

ETTSBM

22" (\*)

ETTSBL

24" (\*)

(\*) Measure across back, hip to hip, add

2" to determine correct size.

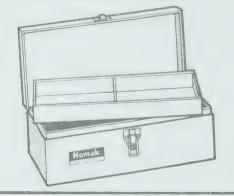
**ETNSBS** 

Nylon safety belt with 2 "D" rings and nylon lanyard (no tool capacity) - small ETNSBM Nylon safety belt (same as above)

- medium

ETNSBL Nylon safety belt (same as above)

- large



### **TOOL BOX**

Sho

Approximate size 22" × 10" × 10"

**ETTBL** 



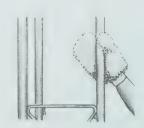
HARD HAT

**ADJUSTABLE** 

**ETHH** 



Top quality Split Cowhide leather with shirred elastic wrist. Gunn cut with straight thumb.



PAINT MITT

**ETPM** 

**ETLG** 



3 strand lay rope. Lubricated to resist water and

FTMR3/8 3/8" (Tensile Strength - 1,220 lbs.) 1/2" (Tensile Strength - 2,380 lbs.) ETMR1/2 5/8" (Tensile Strength - 3,960 lbs.) ETMR5/8



CABLE GRIPS

ETCG50

ETCG75 ETCG100

### **POLYPROPOLENE ROPE**

.75"

Minimum

Cable Size

.16"

.37" |

600' or 1,200' coils only.

ETPR3/8 ETPR1/2 ETPR5/8

Maximum

Cable Size

.50"

.75"

1.00"

3/8" (Tensile Strength - 2,440 lbs.) 1/2" (Tensile Strength - 3,780 lbs.)

5/8" (Tensile Strength - 5,600 lbs.)



SERVING TOOL

CST<sub>1</sub>



**PINCH BAR** 

ETPB30

5'

Maximum

Safe Load

8.000 lbs.

10.000 lbs.

15.000 lbs.

### LIGHT DUTY CABLE HOIST

3/16" aircraft type cable.

**ETLDCH** 

abrasion.

2 Ton Capacity, Max. Lift 6'



### **HEAVY DUTY CHAIN HOIST**

6,000 lb. hoist especially designed for close quarter lifting, pulling and stretching jobs. Hook latches included.

ETHDCH 3 Ton Capacity, Max. Lift 10'



### WINCHES



ETHW2000 Heavy duty hand winch (Drum cap. -735' 1/8" cable, Lift Cap. 2,000 lbs.)

ETHW4000

Heavy duty hand winch (Drum cap. 460' 1/4" cable, Lift Cap. 4,000 lbs.

safe

working load



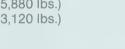
### **ETGPW1000**

Gasoline powered, medium duty (Drum cap. 1,400' 3/8" cable, Lift Cap. 2,000 lbs.)

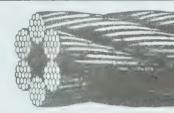


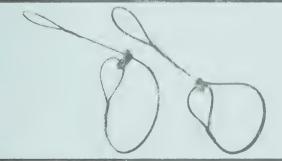
### WINCH CABLE

1/8" (Breaking Strength - 2,000 lbs.) 1/4" (Breaking Strength - 5,880 lbs.) 3/8" (Breaking Strength - 13,120 lbs.)









### CHOKER SLING -Cable braided eye and eye.

ETCS3/8×3 3', 3/8" (Max. Strength - 1,600 lbs.) ETCS3/8×6 6', 3/8" (Max. Strength - 1,600 lbs.) ETCS3/8×15 15', 3/8" (Max. Strength - 1,600 lbs.) ETCS3/8×30 30', 3/8" (Max. Strength - 1,600 lbs.) ETCS1/2×3 3', 1/2" (Max. Strength - 2,800 lbs.) 6', 1/2" (Max. Strength - 2,800 lbs.) ETCS1/2×6 15', 1/2" (Max. Strength - 2,800 lbs.) ETCS1/2×15 ETSC1/2×30 30', 1/2" (Max. Strength - 2,800 lbs.)



### SNATCH BLOCKS

Forged steel swivel hooks, yokes, sheaves, and shackles.

ETSB18HHD	with hook	(8000#
ETSB18HLD	with hook	(1200#
ETSB19SHD	with shackle	(8000#
ETSB19SLD	with shackle	(1200#

### CHAIN

1/2" chain with 2 clevis hooks.

10' long ETCHN1/2





### SCREW PIN SHACKLE

ETSPS3/4

3/4"



### 5" WOOD BLOCKS ETWB2

2 Part w/Shackle (1,800 Ibs. safe load)

ETWB3

3 Part w/Shackle (2,400

lbs. safe load)



### **ERECTION FIXTURES**

ETGPS44L 44' standard

EF25G

ETGPS60H 60' heavy duty

12' (for BX towers) 25' light duty

EF2545 EF6520RH

**EFSSVRH** 

16' heavy duty w/rotating head (for #55 and 20' #65 sections)

12' (for towers w/1-1/4" side rails)

16' w/rotating head (for self-

supporting sections)



### **DYNAMOMETERS**



ETDYNS750 For 5/16" to 3/4" **Guy Strand** 

ETDYNS875 For 5/8" to 7/8" Guy Strand



ET750SAD Saddle for measuring less than 5/16" Guy Strand (Use with ETDYNS750)

Dial Type

**ETDYNDE** 10,000 lb. Cap., 100 lb. Increments

**ETDYNDM** 5,000 kg. Cap., 50 kg. Increments

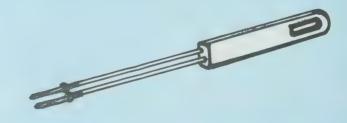




### **UNIVERSAL TRANSIT**

ETUT Transit with compass and tripod **ETTRANSIT** Transit only **ETTRIPOD** Tripod only

**NEON TEST LIGHT** 510024



The illustrations of the equipment are meant only to be typical. We are not responsible for the determination of riggings to be used on a job. This is the sole responsibility of the tower erector.

Specifications subject to change without notice. Prices available upon request. F.O.B. Peoria, IL, U.S.A

ROHN

P.O. BOX 2000, PEORIA, IL 61656 U.S.A.

TWX: 910-652-0646 FAX: 309-697-5612

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### ACCESSORIES

	ACCEDBOKIES		
PART NUMBER			WT.
	GUY WIRE GALVANIZED · 7-STRAND - PH	REFORMED	
*3/16EHS	3/16° quy wire - extra high strength		73/MFT
*1/4EHS	3,990 lbs. breaking strength		·
.1\4002	<pre>1/4" guy wire - extra high strength 6,650 lbs. breaking strength</pre>		120/MFT
5/16EHS	5/16° guy wire - extra high strength 11,200 lbs. breaking strength		205/MFT
3/8EHS	3/8" guy wire - extra high strength		273/MFT
7/16EHS	15,400 lbs. breaking strength 7/16 guy wire - extra high strength		399/MFT
1/2EHS	20,800 lbs. breaking strength		
1/2602	<pre>1/2* guy wire - extra high strength    26,900 lbs. breaking strength</pre>		517/MFT
9/16EHS	9/16" guy wire - extra high strength 35,000 lbs. breaking strength		671/MFT
5/8EHS	5/8" guy wire - extra high strength		813/MFT
	42,400 lbs. breaking strength		
*Available in 500' or 1,0	000' coils. Order accordingly.		
	GUY WIRE GALVANIZED 19-STRAND - PR	REFORMED	
3/4EHS	3/4" guy wire - extra high strength		1155/MFT
7/8EHS	58,300 lbs. breaking strength 7/8" guy wire - extra high strength		1581/MFT
·	79,700 lbs. breaking strength		
1BS	1" bridgestrand 122,000 lbs. breaking strength		2100/MFT
NOTE: The second of the second of	ine mealing change of more wine and individual	les de la lance annuel annuel de la constant	
NOTE: There is a guy wi	ire reeling charge on guy wire sold individual	ly in large enough quantities	to be reeled
	SPECIAL GALVANIZED TURNBUCKL (HIGH STRENGTH)	ES	
2 /0mpmen			
3/8TBE&E 3/8TBE&J	3/8" x 6" turnbuckle 6,000 lbs. ultimate strength	eye & eye eye & jaw	1
1/2TBE&E	1/2" x 12" turnbuckle	eye & eye	2
1/2TBE&J	11,000 lbs. ultimate strength	eye & jaw	2
5/8TBE&J	5/8" x 12" turnbuckle	eye & jaw	3
0.44=====	17,500 lbs. ultimate strength		
3/4TBE&J	3/4" x 12" turnbuckle 26,000 lbs. ultimate strength	eye & jaw	5
7/8TBE&J	7/8" x 12" turnbuckle	eye & jaw	8
1TBE&J	36,000 lbs. ultimate strength 1" x 12" turnbuckle	eye & jaw	10
11/4X18TB	50,000 lbs. ultimate strength	eye & jaw	24
11/4/1010	76,000 lbs. ultimate strength	ele a lam	49
11/2X18TB	1-1/2" x 18" turnbuckle 107,000 lbs. ultimate strength	eye & jaw	30
13/4X18TB	1-3/4" x 18" turnbuckle	eye & jaw	45
	140,000 lbs. ultimate strength		
	TURNBUCKLE SAFETIES (Refer to Drawing No. B680324 for addition	al information.)	
TBSAFETY	For use with 3/8" to 1" turnbuckles (consi	sts of 15' 1/4" guy wire	1
TBSAFETYH	and 2 1/4CCM)  For use with 1-1/4° and larger turnbuckles	(consists of 15' 5/16"	4
	guy wire and 2 5/16CCF)		

NOTE: To arrive at safe working load of guy wire and turnbuckles, appropriate safety factor must be applied.

Refer to alphabetical/numerical price list for current prices. Other prices are available upon request.

PART NUMBER

WT.

### ACCESSORIES

	ZINC PLATED CABLE CLAMPS	
1/8CCM	1/8" cable clamps, malleable	3/100
	HOT, DIP GALVANIZED CABLE CLAMPS	
3/16CCM	3/16° cable clamps, malleable	5/100
3/16CCF	3/16" cable clamps, forged	10/100
1/4CCM	1/4" cable clamps, malleable 1/4" cable clamps, forged	12/100
1/4CCF		18/100 32/100
5/16CCF	5/16" cable clamps, forged 3/8" cable clamps, forged	• •
3/8CCF	7/16" cable clamps, forged	48/100 72/100
7/16CCF 1/2CCF	1/2" cable clamps, forged	78/100
9/16CCF	9/16" cable clamps, forged	96/100
5/8CCF	5/8" cable clamps, forged	100/100
	STANDARD HOT DIP GALVANIZED THIMBLES	
1/4TH	For 1/8" or 3/16" wire with cable clamps	4/100
3/8TH	For 1/4" wire with cable clamps	8/100
	HEAVY DUTY HOT DIP GALVANIZED THIMBLES	
5/16THH	For 3/16" wire with big grips	14/100
3/8THH	For 1/4" wire with big grips or 5/16" wire with cable clamps	25/100
7/16THH	For 5/16" wire with big grips	36/100
1/2THH	For 3/8" or 7/16" wire with cable clamps or 3/8" wire with big grips	50/100
9/16THH	For 7/16" wire with big grips	51/100
5/8THH	For 1/2" or 9/16" wire with cable clamps or big grips	75/100
3/4THH	For 5/8" wire with cable clamps or big grips	150/100
7/8THH	For 3/4" wire with big grips	185/100
ltt	For 7/8" wire with big grips	292/100
	SERVING TOOL	
CST1	Serving tool	3
	HOT DIP GALVANIZED ROUND PIN ANCHOR SHACKLES	
3/8S	l ton safe working load	30/100
1/2S	2 ton safe working load	65/100
5/8S	3-1/4 ton safe working load	130/100
3/4S	4-3/4 ton safe working load	216/100
7/8S	6-1/2 ton safe working load	325/100
1S	8-1/2 ton safe working load	500/100
11/8S	9-1/2 ton safe working load	700/100
11/4S	12 ton safe working load	960/100
	GUY INSULATORS	
502	Guy strain insulator, closed end type 10,000 lbs. strength	1
504	Guy strain insulator, closed end type	1-1/2
506	12,000 lbs. strength Guy strain insulator, closed end type	3
	20,000 lbs. strength	
556	Guy strain insulator, closed end type 33,000 lbs. strength	4-1/2
	INSULATOR CLEVISES	
J732	Use with 504, 12,000 lbs. strength, 5" length	130/100
NOTE: 1732 can b	a used with 506 insulators if strongth requirement does not exceed 12 000 lbs. I	722 **** 11 5-

 $\underline{\text{NOTE}}$ : J732 can be used with 506 insulators if strength requirement does not exceed 12,000 lbs. J732 will be discontinued as soon as our present inventory is depleted.

### ACCESSORIES

PART NUMBER			WT.
	CONCRET	E ANCHORS	
GAC253	5/8" x 5' rod with 3	-hole twin equalizer	11
GAC255	to the second	-hole twin equalizer	12
GAR25	5/8" x 5' rod only w	ith eve	8
EP25343	_	er plates with nuts and bolts	3
EP25345		r plates with nuts and bolts	4
PART NUMBER	WT.	PART NUMBER	WT.
GAC3455	25	**GAC5855	220
GAC5655	65	**GAC5955	310
GAC5755	125	**GAC6055	380
	WALL	ANCHORS	
GAW25		wall eye anchor (rod only) ining plates and nuts	3
GAWP253		in equalizer plates (EP25343)	6
GAWP255		in equalizer plates (EP25345)	7
<u></u>	CONCRETE BASE BOLTS (W/I	OOUBLE NUTS) AND PIER PINS	
1/2X12BB	Base bolt		1/2
5/8X12BB	Base bolt		1
3/4X16BB	Base bolt		1-1/2
**7/8X16BB	Base bolt		3
3/4X12PP	Pier pin		1
15/16X16PP	Pier pin		3
	EARTH SC	REW ANCHOR	
GAS604	6" screw plate with (holding power, 2		7

<sup>\*\*</sup>Not a stock item. Allow sufficient time for ordering and delivering.

Refer to alphabetical/numerical price list for current prices.

Other prices are available upon request.

F.O.B. PEORIA, ILLINOIS. SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

SHEET D-2328 (Replaces D-2079)

### ACCESSORIES

	ACCESSORIES	
PART NUMBER		WT.
	GROUNDING KITS	
BGK	Base Grounding Kit	,10
	1 - 5/8" x 8' copper rod	
	1 - Brass tower attachment lug w/hardware	
	1 - Brass rod clamp	
	10'- #4 solid copper wire	
DOVE	Page Crowndian Vit	10
BGKE	Base Grounding Kit	10
	1 - 5/8" x 8' galvanized rod	
	1 - Tower attachment lug w/hardware	
	1 - S58 rod clamp	
	5'- #6 solid copper wire	
AGK	Anchor (Wire) Grounding Kit (For 3 Anchors)	30
	3 - 5/8" x 8' copper rods	
	3 - Brass rod clamps	
	9 - Guy wire ground clamps	
	45'- #4 stranded copper wire	
	· · · · · · · · · · · · · · · · · · ·	
RGK	Anchor Rod Grounding Kit (For 3 Anchors)	24
	3 - 5/8" x 8' copper rods	
	3 - Brass rod clamps	
	3 - Brass attachment lugs w/hardware	
	15'- #4 solid copper wire	
AGKE	Anchor (Wire) Grounding Kit (For 3 Anchors)	30
AGRE	3 - 5/8" x 8' galvanized rods	30
	3 - S58 rod clamps	
	9 - Guy wire ground clamps	
	45'- #6 solid copper wire	
RGKE	Anchor Rod Grounding Kit (For 3 Anchors)	24
	3 - 5/8" x 8' galvanized rods	
	3 - S58 rod clamps	
	3 - Attachment lugs w/hardware	
	15'- #6 solid copper wire	
	GROUND RODS & ACCESSORIES	
GR8G	5/8" x 8' galvanized rod w/ground wire clamp	8
GR8C	5/8" x 8' plain end copper rod w/ground wire clamp	8
GR10C	3/4" x 10' threaded copper rod w/ground wire clamp	14
3/4C	3/4" ground rod coupling (to joint GR10C together	1/2
	and required when 3/4D used)	_,
3/4D	3/4" ground rod driver (for use w/GR10C)	1/2
		_,
	COPPER WIRE	
CW6S	#6 solid	80/MFT
CW4S	#4 solid	125/MFT
CW4ST	#4 stranded	125/MFT
CW2S	#2 solid	200/MFT
CW2ST	#2 stranded	200/MFT
CW2/OST	#2/0 stranded	411/MFT
CW4/0ST	#4/0 stranded	653/MFT

# BIG-GRIPS AND VARI-GRIPS (DEAD END) COMPLETE WITH END SLEEVE

PART NUMBER			WT.
		FOR 7-STRAND GALVANIZED GUY WIRE	
BG2142	3/16"	Big-Grip, 23" length, complete with GC65303 end sleeve	28/100
BG2144	1/4"	Big-Grip, 27" length, complete with GC65136 end sleeve	38/100
BG2146	5/16"	Big-Grip, 33" length, complete with GC65128 end sleeve	66/100
*BG2147	3/8"	Big-Grip, 37" length, complete with GC65264 end sleeve	95/100
*BG2148	7/16"	Big-Grip, 40" length, complete with GC65265 end sleeve	140/100
*BG2115	1/2"	Big-Grip, 50" length, complete with GC65266 end sleeve	315/100
*BG2116	9/16"	Big-Grip, 55" length, complete with GC65267 end sleeve	480/100
*BG2111	5/8"	Big-Grip, 64" length, complete with GC65268 end sleeve	650/100
	<u> </u>	OR 19-STRAND GALVANIZED GUY WIRE	
*BG2112	3/4"	Big-Grip, 76" length, complete with GC65269 end sleeve	1080/100
*BGMS7023	7/8"	Big-Grip, 90" length, complete with GC65270 end sleeve	1125/100
*1BSVGO	1"	Vari-Grip, 66" length, complete with GC65271 end sleeve	5400/100

- NOTES: 1) End sleeves must be used on all Big-Grips and Vari-Grips. See Drawing B700607 for procedure to apply end sleeve.
  - 2) Oversized heavy duty thimbles must be used with all Big-Grips. Thimbles are not required when using Vari-Grips.
  - 3) There is a limited stock on Vari-Grips. Allow sufficient time for ordering and delivering.

Refer to alphabetical/numerical price list for prices on other items.

<sup>\*</sup>Prices available upon request.

# TO ACHIEVE MAXIMUM CONERAGE WITH THE END SLEEVE, THE APPLICATION SHOULD BE CONDUCTED IN

(BE SUPE TO SELECT PROPER SIZE END SLEEVE)



PLACE THE SLOT SIDE OF THE END SLEEVE OVER THE LONG LEG OF THE DEAD-END.



DRIVE THE SLEEVE DOWNWARD UNTIL THE RODS OF SHORTLEG ARE COM-PLETELY COVERED.



MAY EXTEND ABOVE, THE TOP THE RODS OF THE LONG LEG opo SHOULD BE EVEN WITH. EDGE OF THE SLEEVE. REVISED GUY GRIP TO BIG GRIP DESCRIPTION à o N

REVISIONS

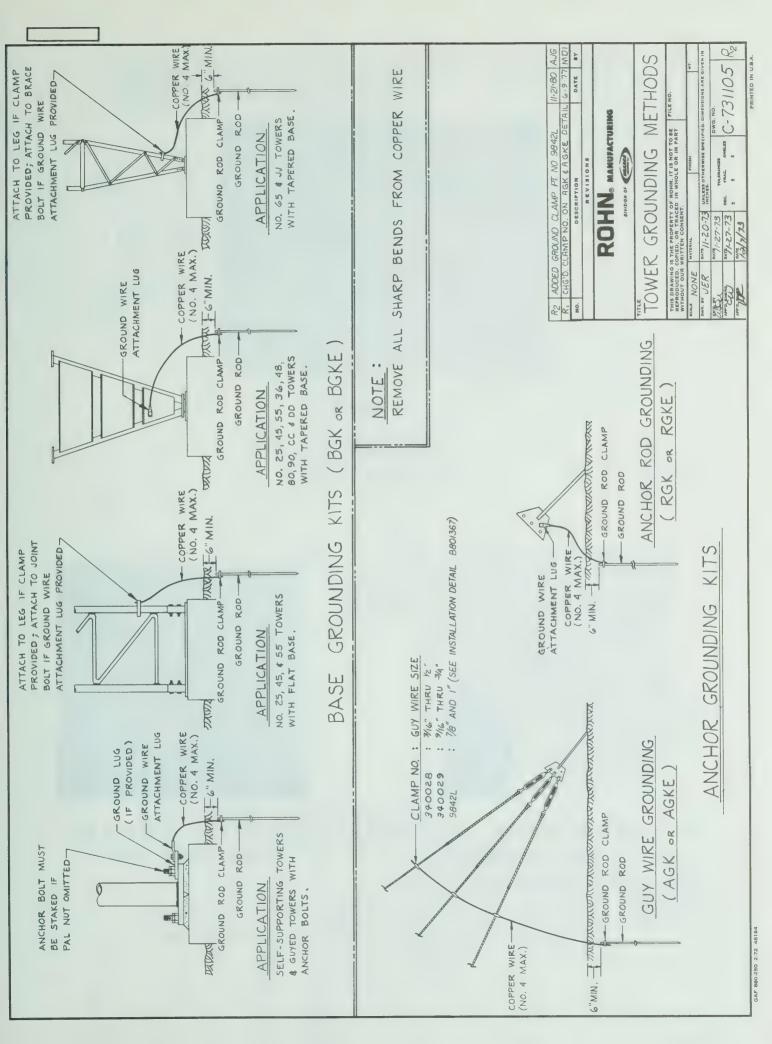
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> FOR BIG-GRIP END SLEEVE APPLICATION PROCEDURE R O

TITLE

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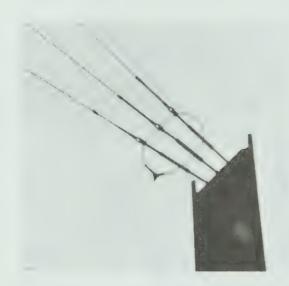
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### PROPER ANCHOR INSTALLATIONS



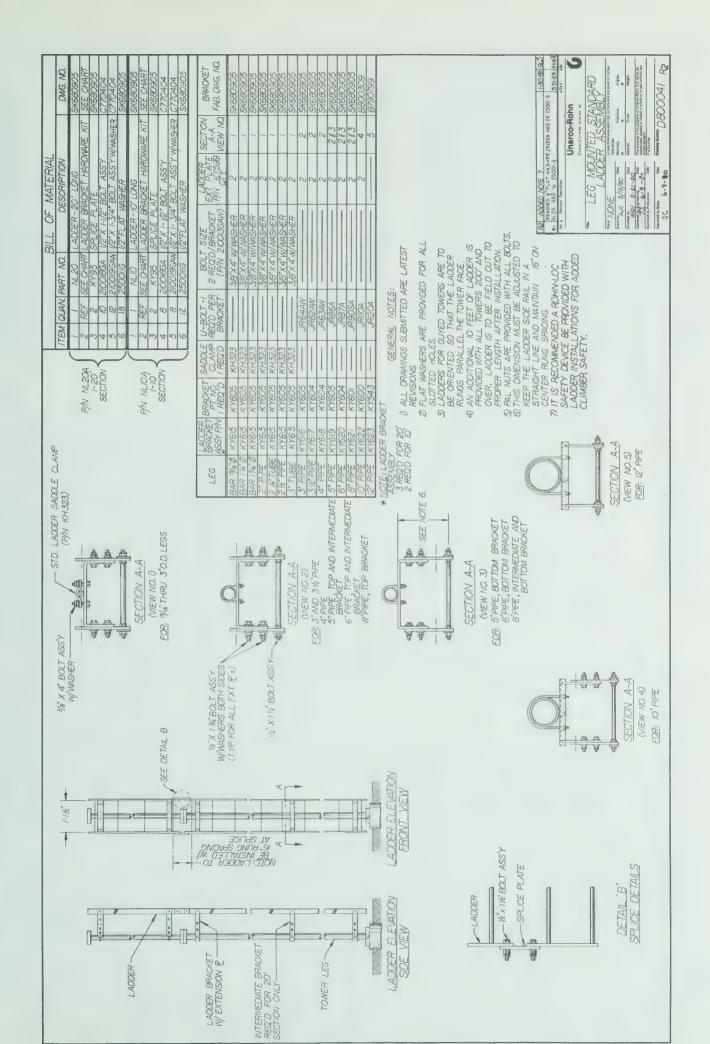
SERVING

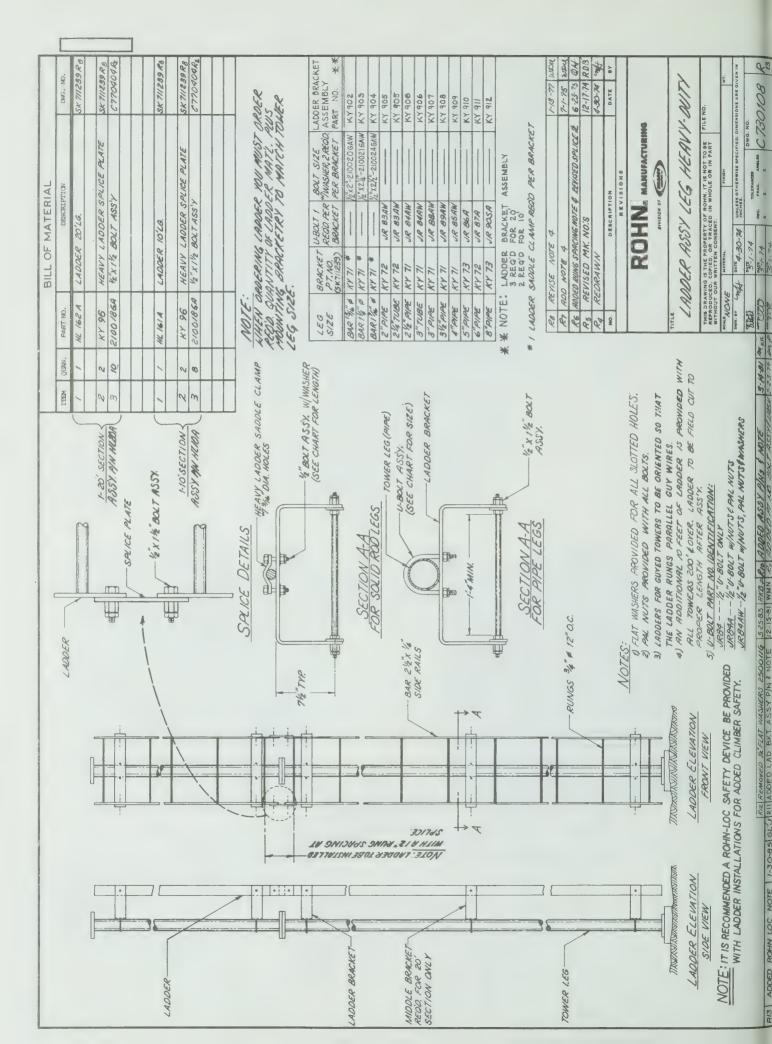


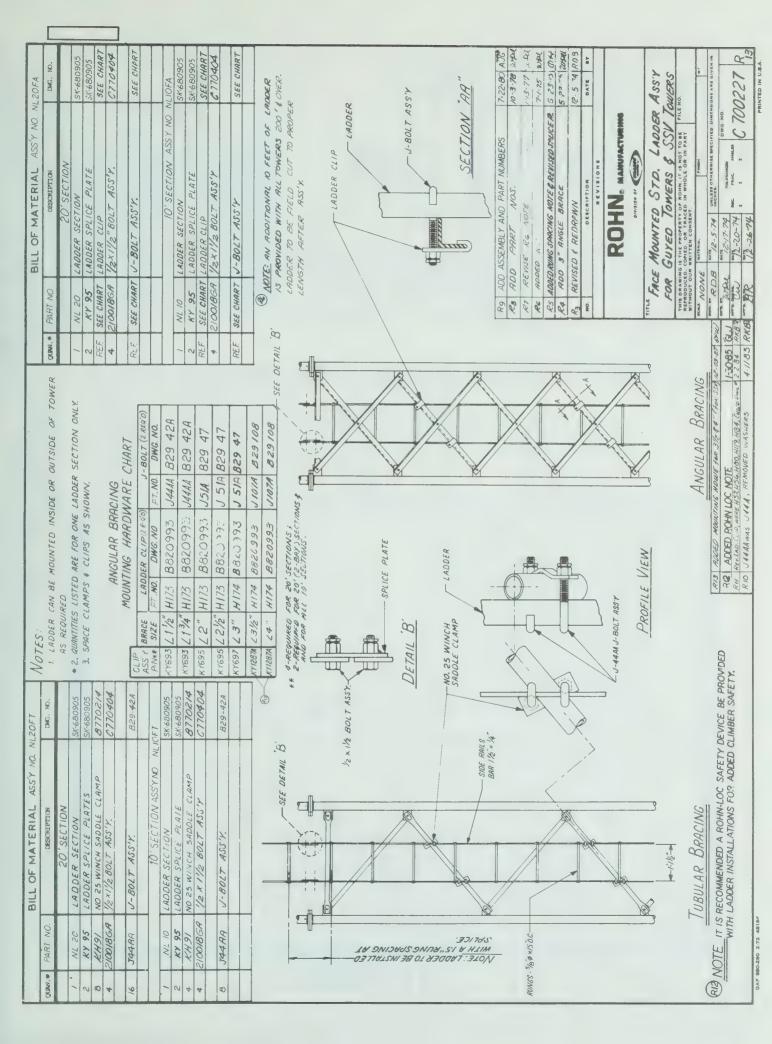
10 I BEAM STUB ANCHOR SAFETY WIRE AND WITH NICROPRESS SLEEVES AND SAFETY WIRE

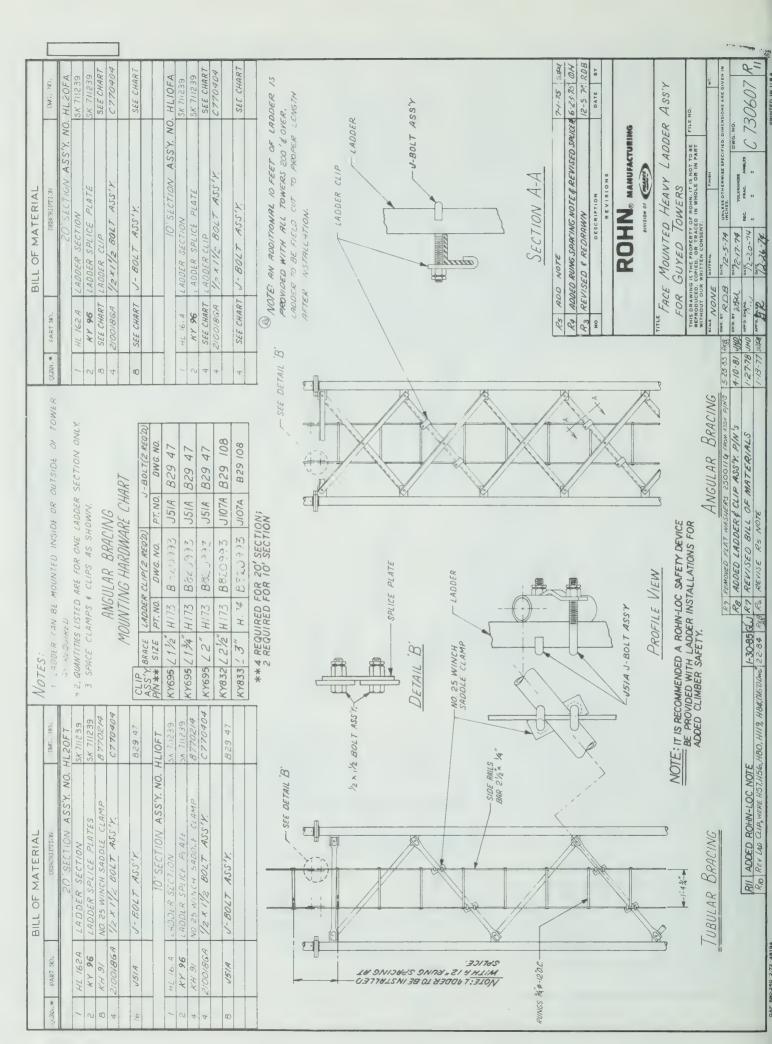


GROUNDING











# ROHN<sub>®</sub> NO PRIME WATER BASE

# **TOWER PAINT**

for use on untreated galvanized surfaces

## **CUT YOUR INSTALLATION COSTS**

Tower White and Tower Orange are protective coatings formulated with a vinyl/acrylic emulsion resin providing long-term protection and performance. These coatings offer excellent resistance to weathering, ease of application

and freedom from fire hazard. Meets FAA regulations for color coding transmission towers, Federal Standard No. 595a Colors, 12197 and 17875.

### PREPARATION

Galvanized Surfaces: It is not necessary to etch or weather new galvanized surfaces. Remove all deteriorated coatings by scraping or wirebrushing. Remove grease, oil, salt, white rust, or dirt by washing with a suitable detergent solution. No primer necessary except where galvanize has been damaged, then spot prime with zinc dust primer.

### **APPLICATION**

These products are formulated specifically for application to galvanized steel towers by paint mittens, air atomized spray or airless spray. May be applied as a one coat system. However, to assure maximum color uniformity and hiding, application of an additional coat may be desired. Will also perform well over uncoated galvanized metal surfaces and wood.

### CLEAN UP WITH SOAP AND WATER

### PHYSICAL CHARACTERISTICS

Type Vehicle: . . . . . . . . Blended Vinyl Acrylic Emulsion

Type Solvent: . . . . . . . . . Water

Flash Point: ..... Non-Flammable

Drying Time: ..... At 70°F., (21°C.) and 50% Relative Humidity

 Touch
 1 hour

 Recoat
 2 - 4 hours

 Hard
 3 - 4 weeks

Finish: . . . . Flat

Lead Content: PNT-NP-05 — 9.53% by weight (Dry Film)
PNT-NP-W9 — Less than .06% by weight.

Coverage: 200-400 square feet per gallon at the recommended dry film thickness of 1-2 mils.

Order PNT-NP-05 (orange) or PNT-NP-W9 (white) 11#/gallon



6718 West Plank Road P.O. Box 2000 • Peoria, Illinois 61656

### ROHN TOWER FIELD TREATING & PAINTING SPECIFICATIONS

All instruments of authorization for tower licensing, wherever antenna structures must be painted, clearly outline the manner in which such structures are to be marked. Under no circumstances is there to be any deviation, as F.C.C.'s Field Engineering & Monitoring Bureau has a tight inspection schedule and could issue violation notices to licensees who have not complied.

The pertinent rule section to be observed is:

ANTENNA STRUCTURES SHALL BE PAINTED THROUGHOUT THEIR HEIGHT WITH ALTERNATE BANDS OF AVIATION SURFACE ORANGE AND WHITE, TERMINATING WITH AVIATION SURFACE ORANGE BANDS AT BOTH TOP AND BOTTOM. THE WIDTH OF THE BANDS SHALL BE APPROXIMATELY ONE-SEVENTH THE HEIGHT OF THE STRUCTURES; HOWEVER, THE BANDS SHALL NOT BE MORE THAN 100 FEET NOR LESS THAN 1-1/2 FEET IN WIDTH. ALL TOWERS SHALL BE CLEANED OR REPAINTED AS OFTEN AS NECESSARY TO MAINTAIN GOOD VISIBILITY.

Suggested procedures for treating and painting towers in the field are:

### 1. Treating Galvanized Surfaces for Oil Based Paints:

Prior to painting, the surface of all tower parts shall be treated by applying with a brush a chemical solution containing the following:

2 ounces each - Copper Chloride/Copper Nitrate/Sal Ammoniac, available from Rohn in one package (Rohn Part Number T1)

2 ounces Muriatic Acid, obtain locally (<u>Note</u>: Muriatic Acid is extremely dangerous and should be treated carefully. Wear protective clothing, i.e. gloves, face masks/shields, glasses, etc. Follow the instructions on the container. Rohn takes no responsibility for improper use of Muriatic Acid.)

1 gallon water

2. The treated surfaces shall again be washed with plain water and allowed to completely dry before applying any paint.

### 3. Applying Paint:

All surfaces of all parts of the tower, including any exposed steel of the anchors, turnbuckles and cable clamps, shall be painted, except the guy wires and accessories, such as antennas, ladders, bottom of flanges, lights and cables. All bolts and nuts, which have not been painted during assembly, shall be painted after erecting.

The paint shall be applied by brushing or spraying, depending on conditions or the erector's option. All surfaces shall be uniformly covered, with no streaks or incompletely covered surfaces permitted.

Before painting, all surfaces shall be clean and free from all foreign matter. All painting shall be done in dry weather for best results. Paint shall NOT be applied on wet surfaces, nor when the relative humidity exceeds 80%, or when the temperature of the surrounding air or the surface to be painted is  $50^{\circ}$  F. or below.

Steel shall not be handled until paint is thoroughly dry. After erection, the tower paint shall be carefully touched up, assuring proper coverage of all areas to be painted.

### UNIVERSAL SIDE ARMS - 30 PSF DESIGN ONLY

(For Use With 45, 55, 65, 80, JJ, CC, & DD Towers)

PART NUMBER		WT.
D1130	Side arm - 61" to 73" from tower	70
D1230	Side arm - same as D1130 except with extra horizontal support for top of antenna	90
D1330	Side arm - 36" from tower	55
D1430	Side arm - same as D1330 except with extra horizontal support for top of antenna	75

Note: Side arms are designed to support maximum lateral thrust of 150 lbs. applied 5 ft. above top of mast support tube.

Refer to alphabetical/numercial price list for current prices.

Prices for heavier wind load requirements available upon request.

F.O.B. PEORIA, ILLINOIS

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



### UNIVERSAL SIDE ARMS - 30 PSF DESIGN ONLY

(For Use With 45, 55, 65, 80, JJ, CC, & DD Towers)

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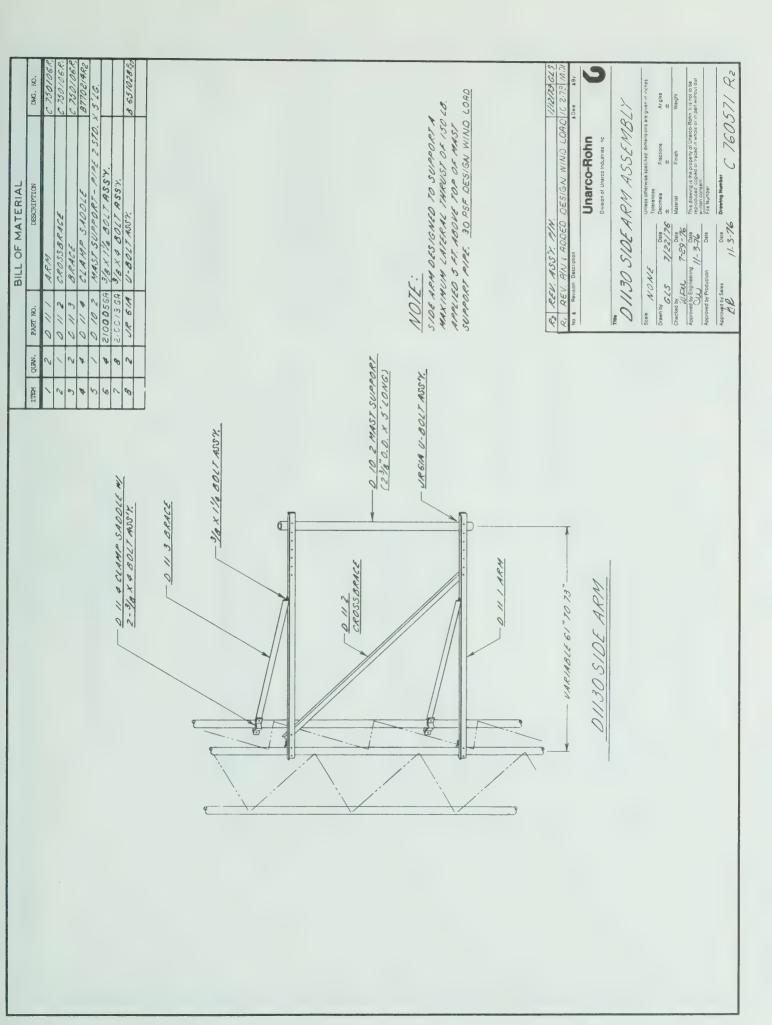
Note: Side arms are designed to support maximum lateral thrust of 150 lbs. applied 5 ft. above top of mast support tube.

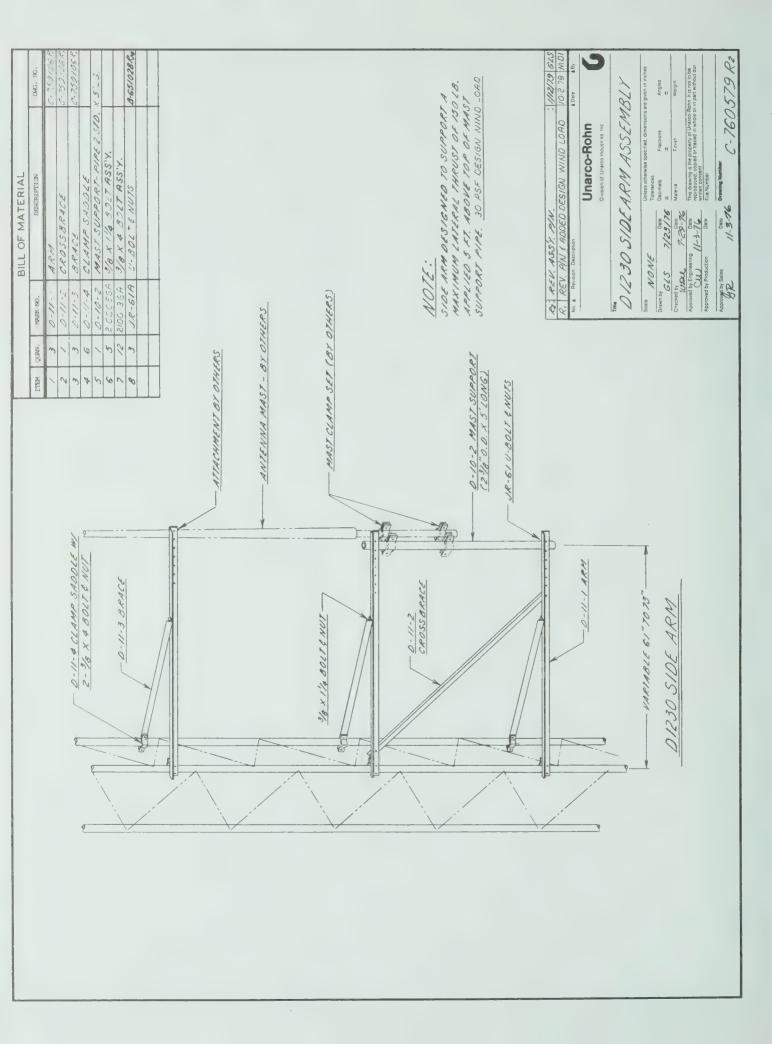
Refer to alphabetical/numercial price list for current prices.

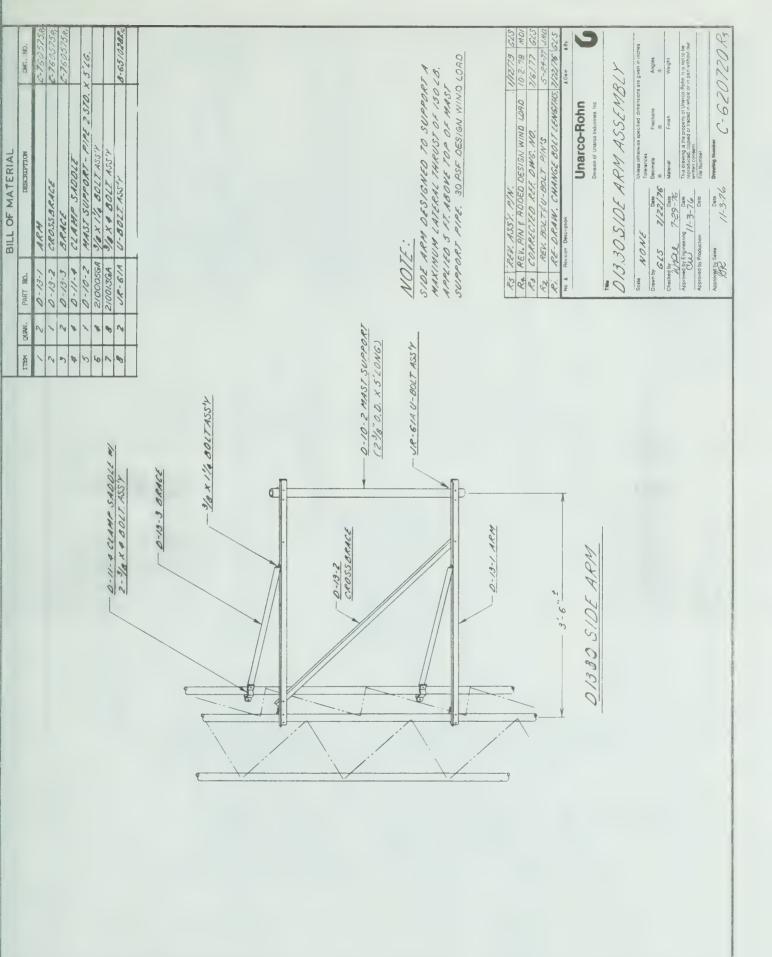
Prices for heavier wind load requirements available upon request.

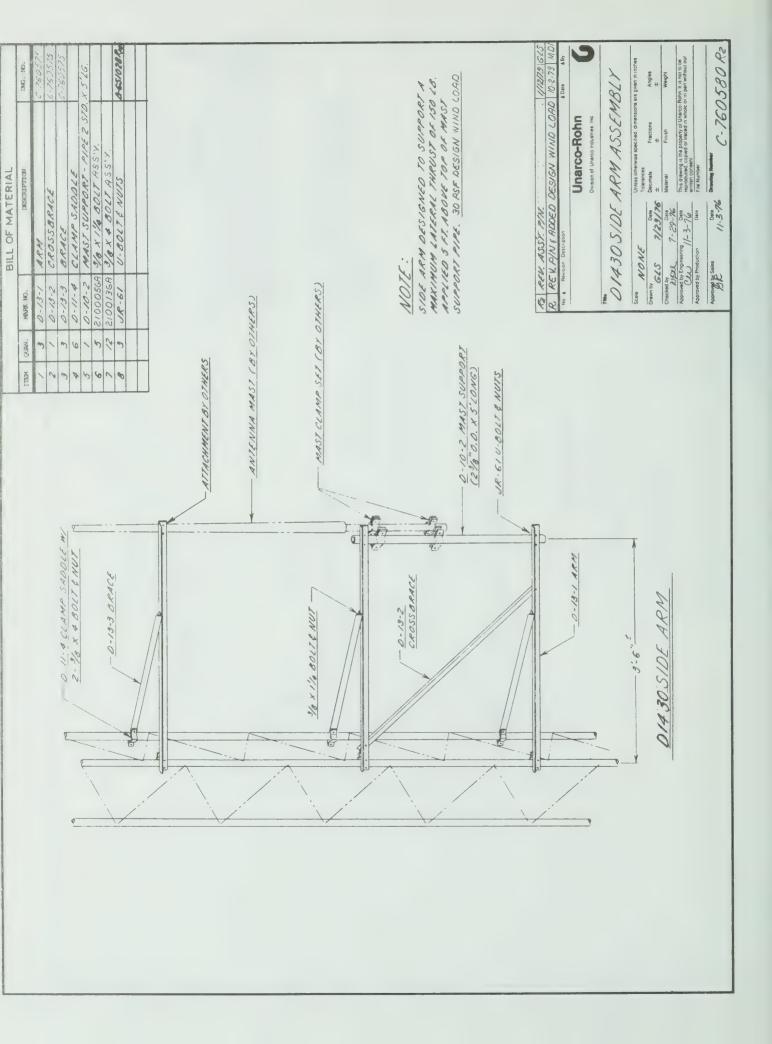
F.O.B. PEORIA, ILLINOIS

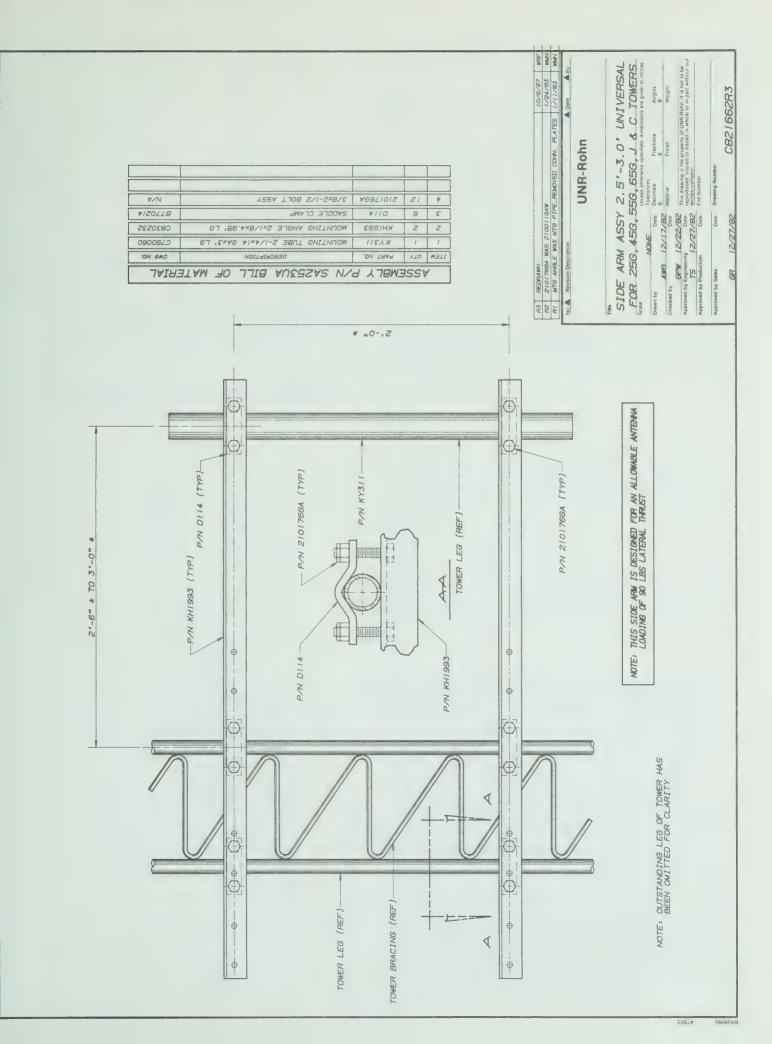


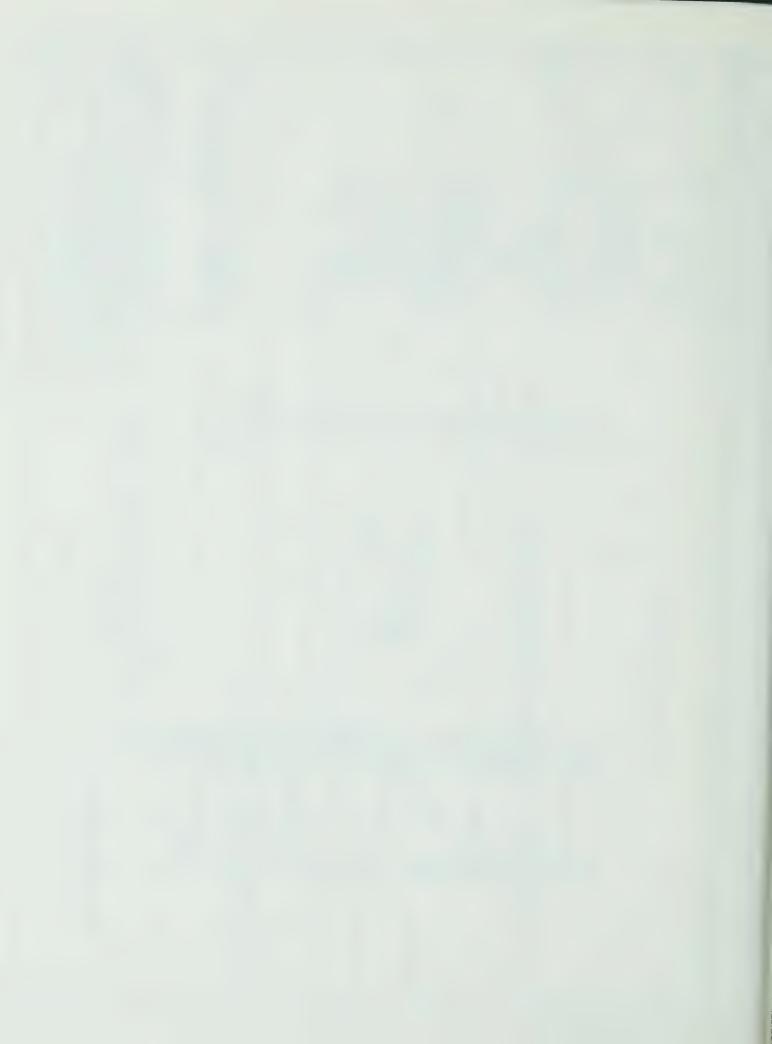


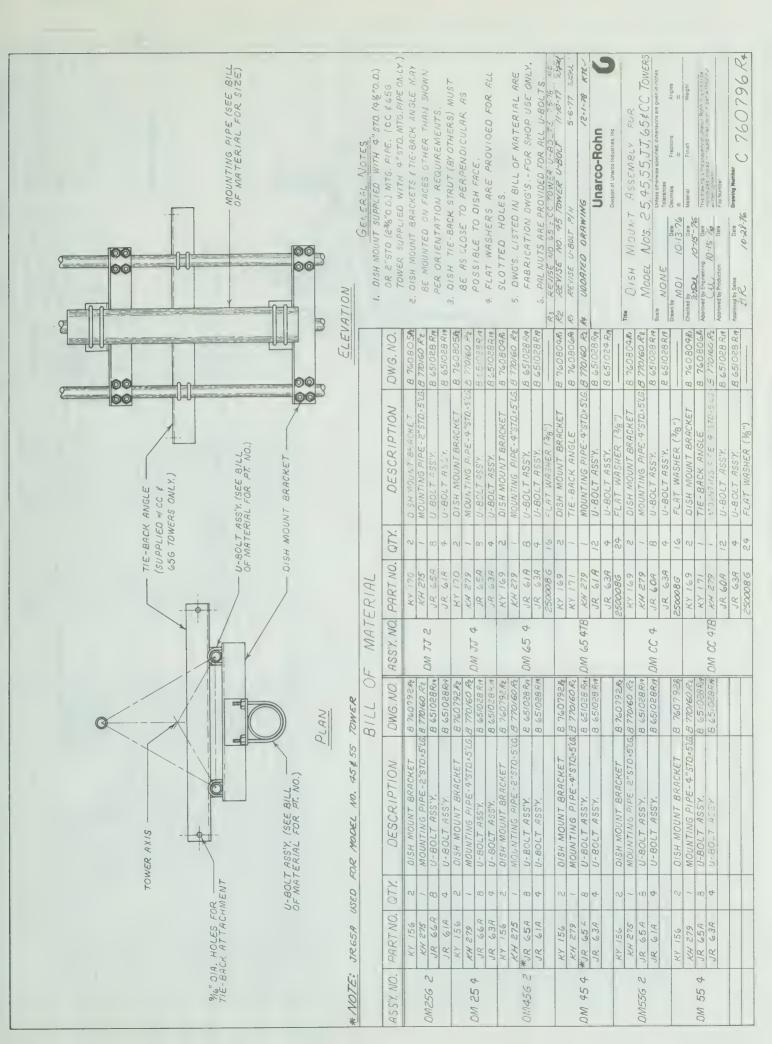


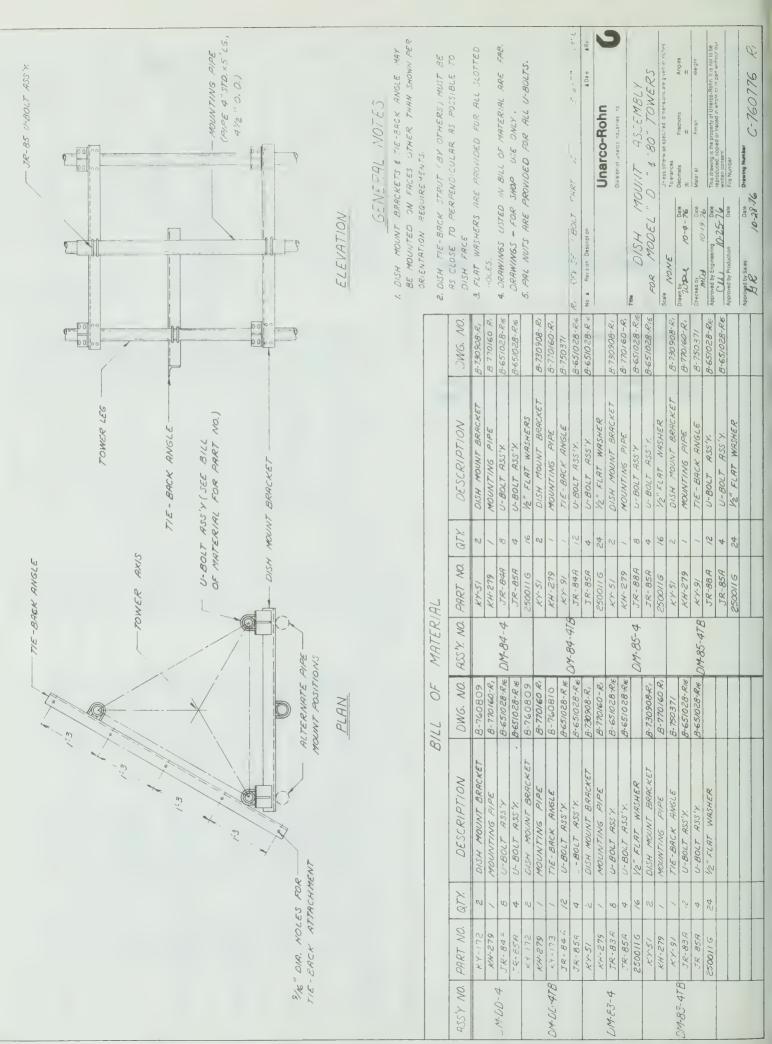


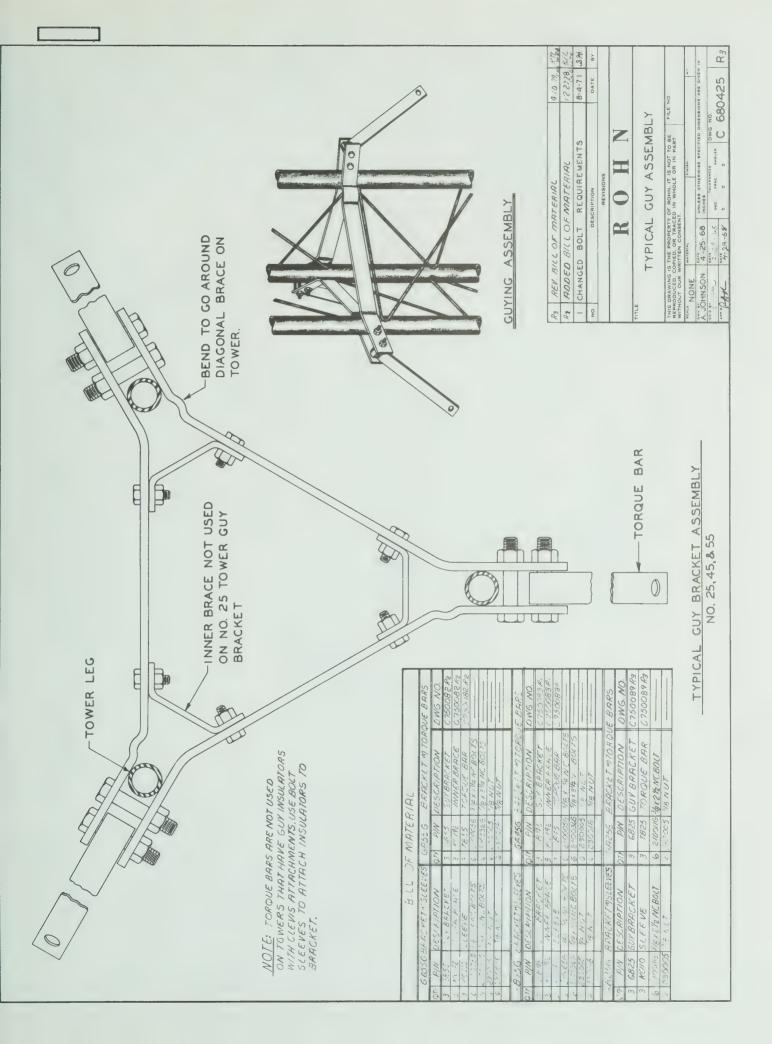


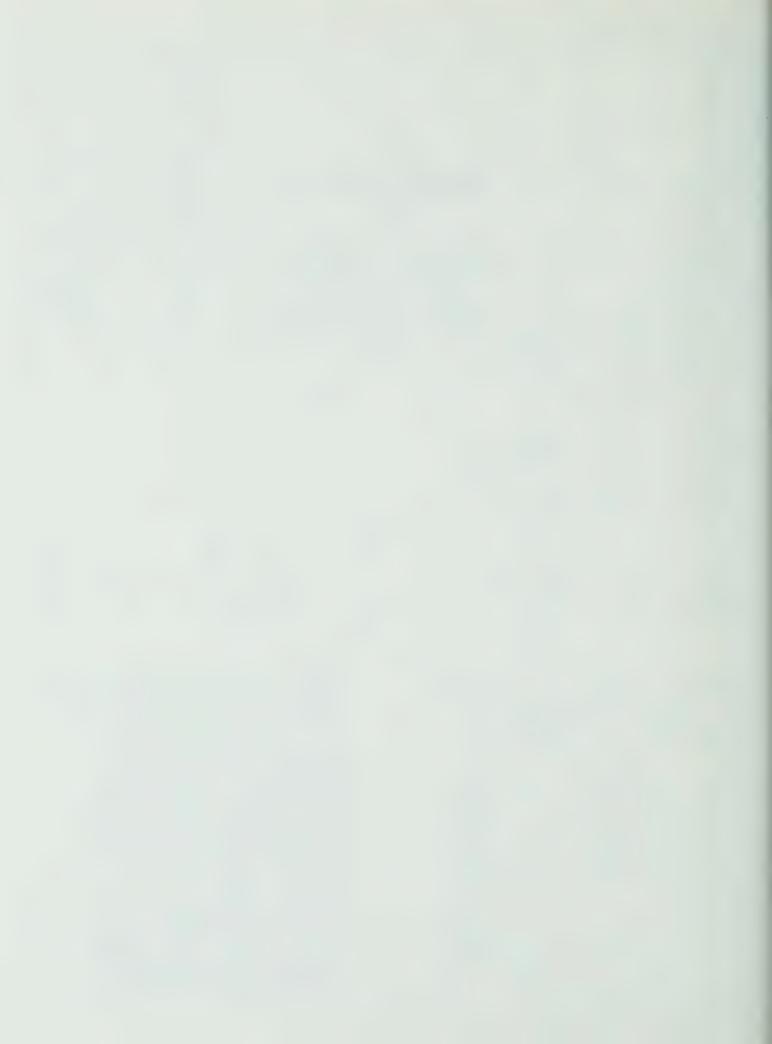


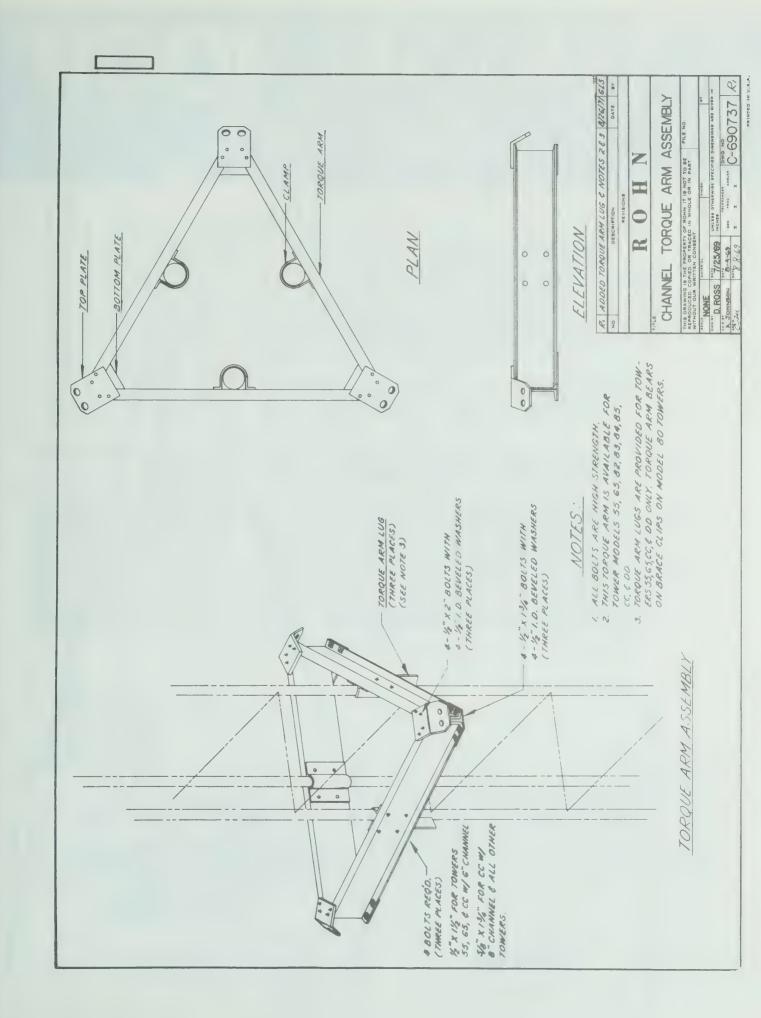


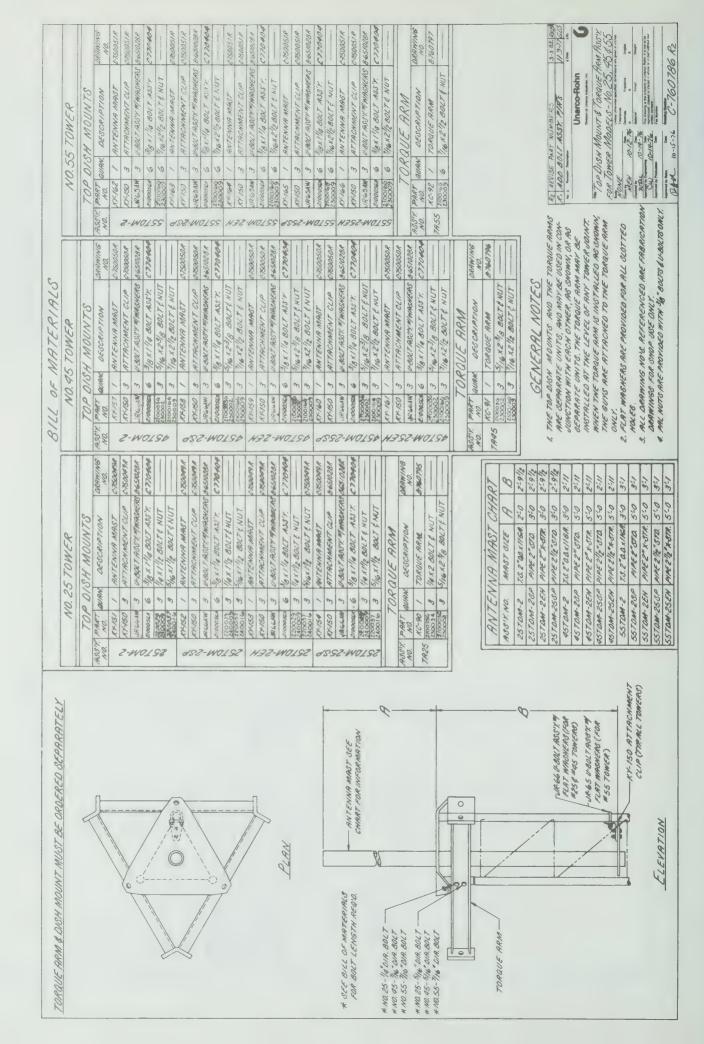












# ROOF MOUNT TRT AG2





Do not install towers or masts near power lines. All towers or masts should be installed out of falling distance of power lines since every electrical and telephone wire should be considered dangerous.

UNR-Rohn recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

All antenna installations must be grounded per local or national codes.

The mixing of so-called interchangeable copies of Rohn towers with Rohn towers is dangerous and voids all engineering or warranty data supplied by UNR-Rohn. Materials used by the so-called copies are not the same quality and have not been tested or engineered by UNR-Rohn to conform to the same quality standards. Mixing of non-Rohn items may endanger the lives of your customers and cause serious tower failures and financial misfortune for all concerned.

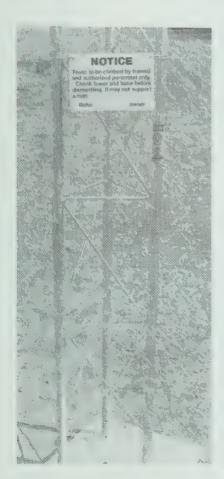


### NOTICE

Tower to be climbed by trained and authorized personnel only. Check tower and base before dismantling. It may not support a man.

Rohn

owner



This "notice" sign should be attached to all towers/bases in a conspicuous location so that all unauthorized and inexperienced personnel are notified and warned.

On large self-supporting towers signs should be attached on all three legs (if they are climbable) or on the ladder.

Aluminum wire is furnished for attaching signs. We highly recommend you check frequently to make sure the sign has not been removed. These 6" x 9" signs may be ordered prepaid for \$6.00 each. Specify part No. ACWS.

TOWER ERECTORS: Please see that these signs are attached as per the instructions above *prior to leaving the tower site*.

ROHN

6718 West Plank Road P.O. Box 2000 • Peoria, Illinois 61656 Phone: 309-697-4400 TWX 910-652-0646 FAX 309-697-5612

Form No. 87-2019



PRE-ASSEMBLED/ALL WELDED CONSTRUCTION



The ideal all purpose work table where mobility is important.

The perfect answer for: TV service shops, hotels, motels, hospitals, office, and home. Provides a work area  $24^{\prime\prime}$  X  $24^{\prime\prime}$  and  $30\frac{1}{2}^{\prime\prime}$  high. Baked enamel finish.

PART NO.
TVST 500 w/o shelf
TVST 600 with shelf

WEIGHT 28 lbs. 30 lbs.



6718 West Plank Road, P.O. Box 2000 Peoria, Illinois 61656 KNOCKED DOWN READY TO ASSEMBLE











TVST400KD

TV Service

Office

Home

Has the same uses as the pre-assembled units. Comes knocked down, easy to assemble. Bottom shelf optional, must be ordered separately. Work area 24" X 24" and 30½" high. Pre-Galvanized finish.

PART NO. Table TVST400KD WEIGHT 24 lbs

Optional Shelf

8 lbs

Form No. 8145

Do not install towers and masts near power lines. All towers or masts should be installed twice the height of the installation away from power lines since every electrical wire must be considered dangerous.

ROHN recommends anti-climb sections on all towers to prevent unauthorized persons from climbing towers.

### All towers and masts should be installed and dismantled by experienced and trained personnel.

All types of antenna installations should be thoroughly inspected by qualified personnel and remarked with hazard and warning labels at least twice a year to insure safety and proper performance.

### All antenna installations must be grounded per local and national codes.

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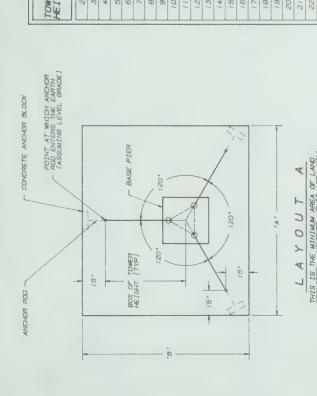
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1310

.0501

1210 1350' 1420'

14.89 17.39 22.85 25.91 77 29.17 29.17 36.26 44.98 44.98 48.19

1470" 1550'

19.61

1110.

1230"

30.36 39.40

10001

550° 600° 700° 750° 800° 850° 950°

10701 1150°

22.50

750. 930

935'

910'

19.01

.069

795 V

12.59

0

ACRES

B

ACRES

TOWER

LAYOUT

K

LAYOUT

.066

1710'

55. 15 61.00 67. 13 73. 56 80. 28 87. 30

1350'

1000.

1200

1410" 1470

1625°

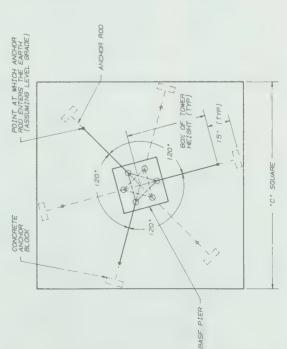
1290

1230'

1870"

1630'

NOT ALWAYS FERMIT ORIENTING TOWER	THE BEST POSITION FOR ANTENNA	DIRECTION.		
N N N N N N N N N N N N N N N N N N N	INI	PAY		



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THIS IS THE MINIMUM AREA OF LAND REQUIRED TO PERMIT ORIENTING THE TOWER IN ANY POSITION FOR ANTENNA PATH DIRECTION.

a	Ĺ	000		7	
IGHT	ACRES	A	В	ACRES	0
20.	0.08	60'	55'	0.10	65'
30°	0.12	75'	70.	0.15	,08
40.	0.17	, 06	80'	0.21	95'
50°	- 1	.001	30'		110'
.09		115.	105	0.39	130°
70.	0.35	130°	115'	0.48	145'
.08	0.43	145.	130	0.59	160'
.06	0.50	155	140	0.70	175'
.00	0.59	170'	150'	0,83	190,
	0.70	185	165	1.01	210'
20.	0.80	200,	175	1.16	225'
30'	0.94	215'	1901	1.32	240'
40'	1.04	225'	2002	1.49	255
	1.16	240'	210'	1.67	270'
.09	1.32	255 '	225'	1.93	290'
70.	1.46	270.	235'	2.14	305'
.08	1.64	285'	250'	2.35	320'
.06	1.76	295°	260'	2.58	335'
.00	1.92	310'	270'	2.81	350'
.01	2.13	325'	285	3.14	370'
20.	2.31	340'	295'	3.40	385'
30'	2.50	350°	310'	3.67	400'
40'	2.68	365'	320'	3.95	4/5'
50'	2.88	380'	330'	4.24	430'
.09	3.13	395'	345'	4.65	450°
70.	3.34	410.	355'	4.96	465'
.08	3.57	450'	370'	5.29	480'
.06	3.80	435'	380'	5.63	495'
	4.03	450'	390'	5 97	510'
	4.33	465'	405	6.45	530'
20.	4.53	475"	4/5	6.82	545
30'	4.84	490'	430'	7.20	.095
40.	5.10	. 505	440.	7.59	575'
.05	5.37	520	450'	8.00	230'
60'	5.71	535	465'	8.54	.013
70'	5.94	545	475'	8,97	.629
80'	6.30	, 095	430'	9,40	640'
.06	6.60	575'	.005	9.85	655
.00	6.91	.065	510'	10.31	670'
10.	7.23	.009	525	10.93	.069
20.	7.55	615'	535'	11.41	705
30'	7.96	630'	550'	11.90	720'
_	8.29	645°	.095	12.40	735'
.05	8.64	.099	570'	15.91	750'
.09	9.00	670'	585	13.61	770,
70.	9.36	.589	.565	14.15	785'
.08	9.80	7007	.019	14.69	900°
200	0				
Ì	B/ 0/	1.1.	620'	15.75	815'

# GENERAL NOTES

DUE TO VAPIABLES INVOLVED IN ROOF AND OTHER INSTALLA-TIONS, IT SHALL BE THE RESPONSIBILITY OF THE CUSTOMER NISTALLER TO PROVIDE STRUCTURALLY ADSOLUTE SUPPORTS FOR PLEE AND ANGLOS CONNECTIONS. IT MAY ALSO BE SERVICE OF A LOCAL ENGINEER TO DETERMINE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THE

-	No A Revision Description				▲ Date ▲ By
			UNR-Rohn	ohn	
Titte					
	LAND AREA REQUIREMENTS FOR BO% GUYED TOWERS	NREA 0% G	REOU	I REMEN TOWERS	17.5
Scale	NONE		Unless otherwise Tolerances	specified, dimensi	Unless otherwise specified, dimensions are given in inches folerances.
Drawn by	WEH 04-08-75	Date	Decimals	Fractions	Angles
Checked by	by 04-15-75	Date	Material	Finish	Weight
Approved	Approved by Engineering	Date	This drawing is the reproduced copie written consent	ad or traced in wh.	This drawing is the property of UNR-Rohn. It is not to be eproduced copied or traced in whole or in part without our written consent.
Approved	Approved by Production	Date	File Number		

410° 420° 440° 450° 450° 460° 480° 500°

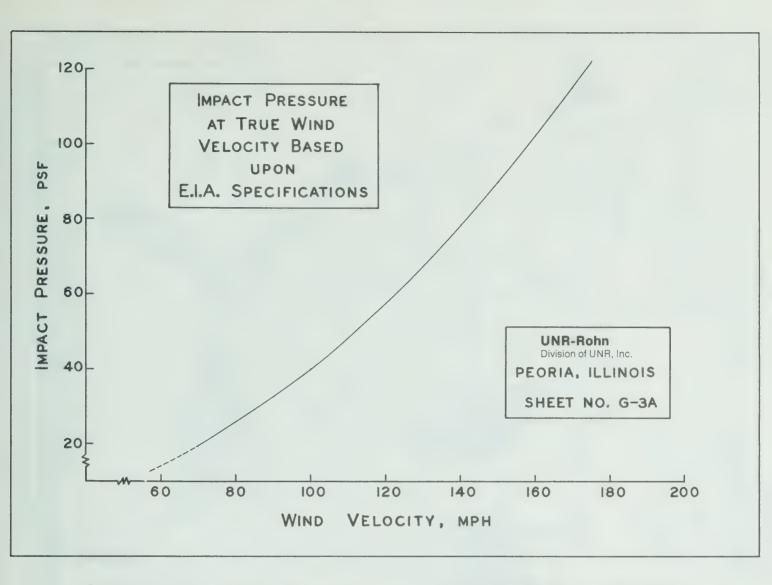
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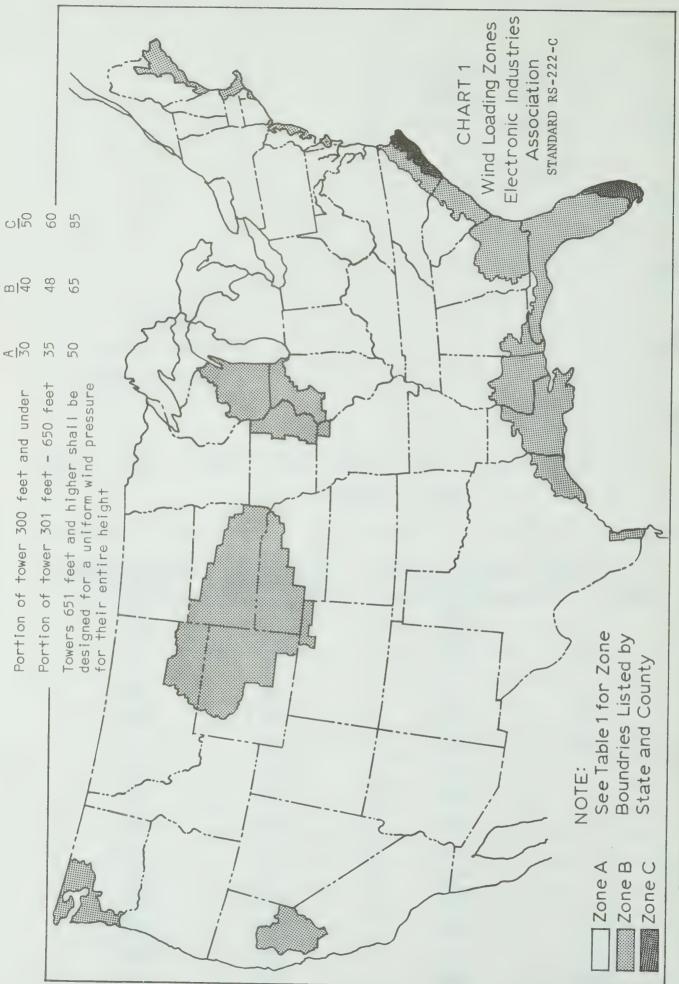
RAK





TRUE WIND	IMPACT PRESSURE,
VELOCITY, MPH	LBS./SQ.FT.
70	19.6
70.7	20.0
75	22.5
80	25.6
85	28.9
86.6	30.0
90	32.4
95	36.1
100	40.0
105	44.1
110	48.4
111.8	50.0
115	52.9
120	57.6
122.5	60.0
125	62.5

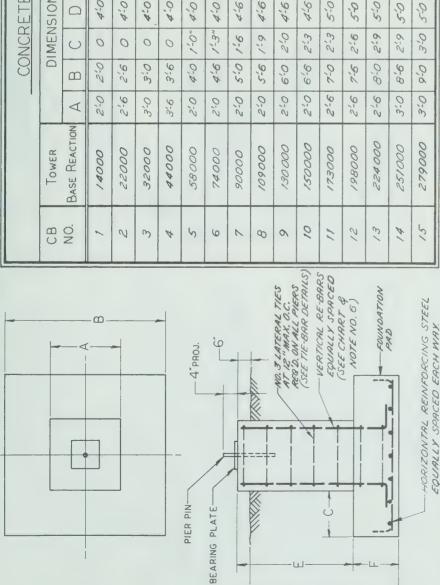
TRUE WIND VELOCITY, MPH	IMPACT PRESSURE, LBS./SQ.FT.
130	67.6
132.3	70.0
135	72.9
140	78.4
141.4	80.0
145	84.1
150	90.0
155	96.1
158.1	100.0
160	102.4
165	108.9
165.8	110.0
170	115.6
173.2	120.0
175	122.5



LOADING ZONE

Heights Lone (above ground)

Location of wind loading zones based on 50 year mean recurrence interval chart from distribution of extreme winds in the United States by H. C. S. Thom published in the proceedings of the American Society of Civil Engineers. April 1960.



(NO. & SIZE) 8-NO.5 8-NO.6 HORIZ. VERTICAL BARS 4-NO.6 (NO. & SIZE) 4-NO.6 4-NO.6 12-NO.7 4-NO.6 4-NO.6 8-NO.6 8-NO.7 8-NO. 7 4-NO.6 8-NO.6 8-NO.6 8-NO.6 8-NO. CU. YDS.) CONC. 1.50 2.00 2.50 2.90 4.00 5.00 6.50 02. 1.00 2.10 1.22 1.42 4.50 1.70 SCHEDUI BEARING PLATE 8010 8010 01 08 BP 15 8015 0 0 0 6 8010 80 15 BP 15 6 80 80 80 80 80 80 0,0 9-1 5.0 5-1 8-3 6-1 6-1 1-3 9-1 1-3 BASE 0 0 0 0 L 3-0 3:0 6,0 3,0 3-6 3-6 5,5 3.9 0 3.3 0 0 0 لبا 0 9 9 DIMENSIONS ш 4-0 0.6 4:0 0.4 4-6 4.6 2,0 0-4 4.0 4.6 4-6 2,0 5-0 9 

BARS

メッシッシャ メ

\* NOV

5-NO.4

6-NO.5 5-NO.5 7-NO.5

6-NO.5

NONEX \* NOV

CBI THRU CBG

NOTE: OUE TO VARRABLES INVOLVED IN ROOF AND OTHER INSTALL-

SEE CHART FOR NO. & SIZE)

SUPPORTS FOR DIER & ANCHOR CONNECTIONS, ITMAY ALSO

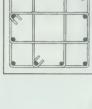
RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE

ATIONS, IT SHALL BE THE CUSTOMER'S ORINSTALLER'S

BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL

SECURE THE SERVICE OF A LOCAL ENGINEER TO





RE-DRAWN-SUPERSEDES (-6/1062/0|2-26-75| 04 7/E BAR DETAILS RE ADDED NOTE ĝ

7-6-76

10-007

12-NO.7

7.20

8015

9-NO.6 9-NO.7

8-NO.6

ROHN. MANUFACTURING DESCRIPTION

5

CB14 & CB

BASE SCHEDUL ليا CONCRET

THIS DRAWING IS THE PROPERTY OF ROMN. IT IS NOT TO BE REPRODUCED, COPIEC. OR TRACED IN WHOLE OR IN PART WITTEN CONSENT.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE GIVEN IN INCHES. 610621 \$ PEC. DATE -26-75
DATE 7-75
OATE 7-75 APO SEGNO 3/7/77 615

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RG REY GEN. NOTES ADDED 884/300 NOTE.

KS ADDED GENERAL NOTE#3

R, RIMONIO RS-222-B SROW CHINOLE NOT. PLATE PROVIDED ONLY ON TOWERS WITH \*3.HORIZ BARS IN CHART REFER ONLY TO THE BARS IN THE FOUNDATION PAD.

L'VERTICAL REINFORCING STEEL MAY BE PLACED WITH AN OOTIONAL STANDARD ACT 90°BEND AT BOTTONA

SEE DRAWING NUMBER B841300.

TOLERANCES

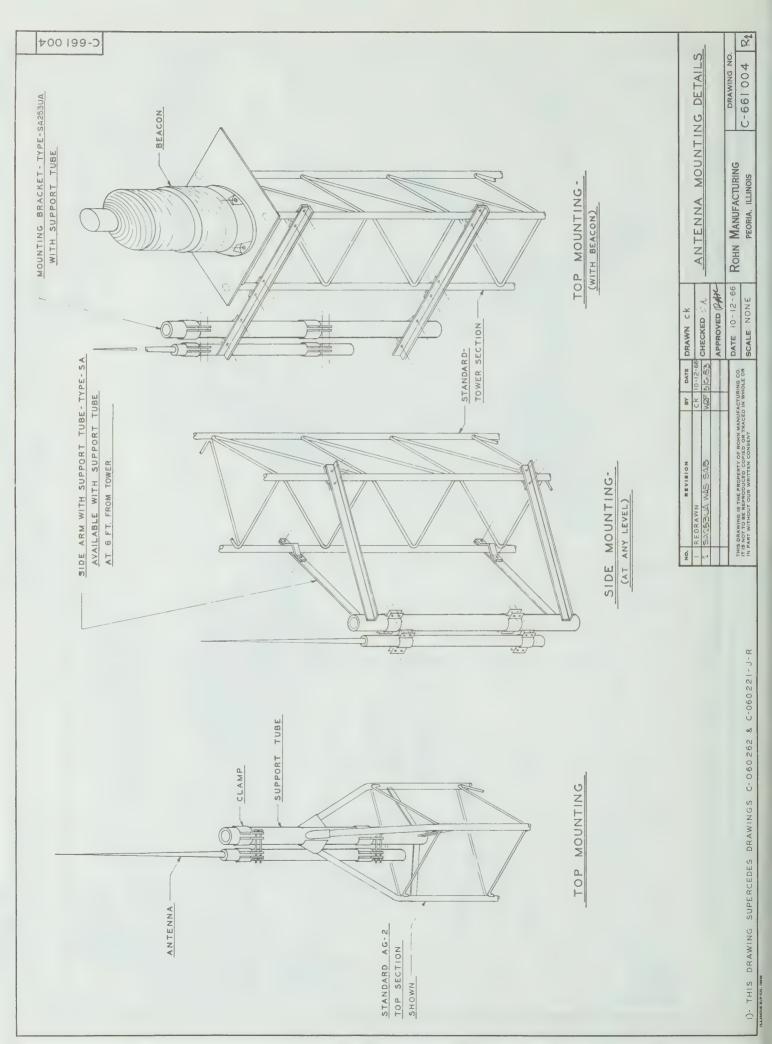
NOTES AND

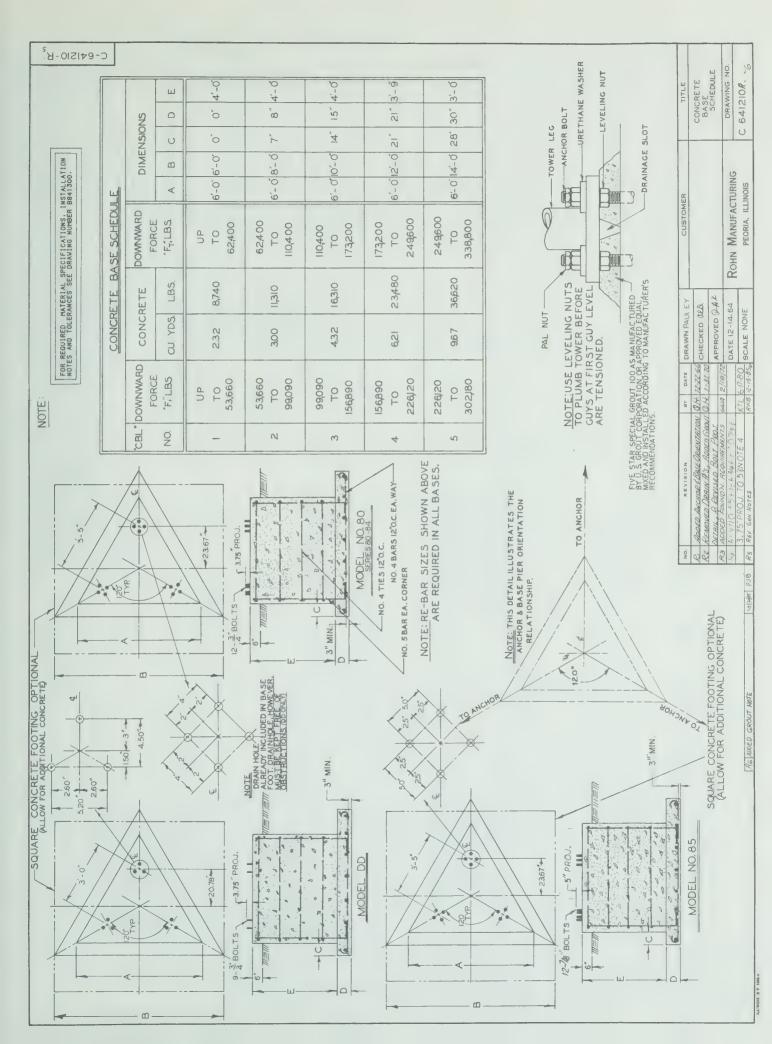
FOR REQUIRED MATERIAL

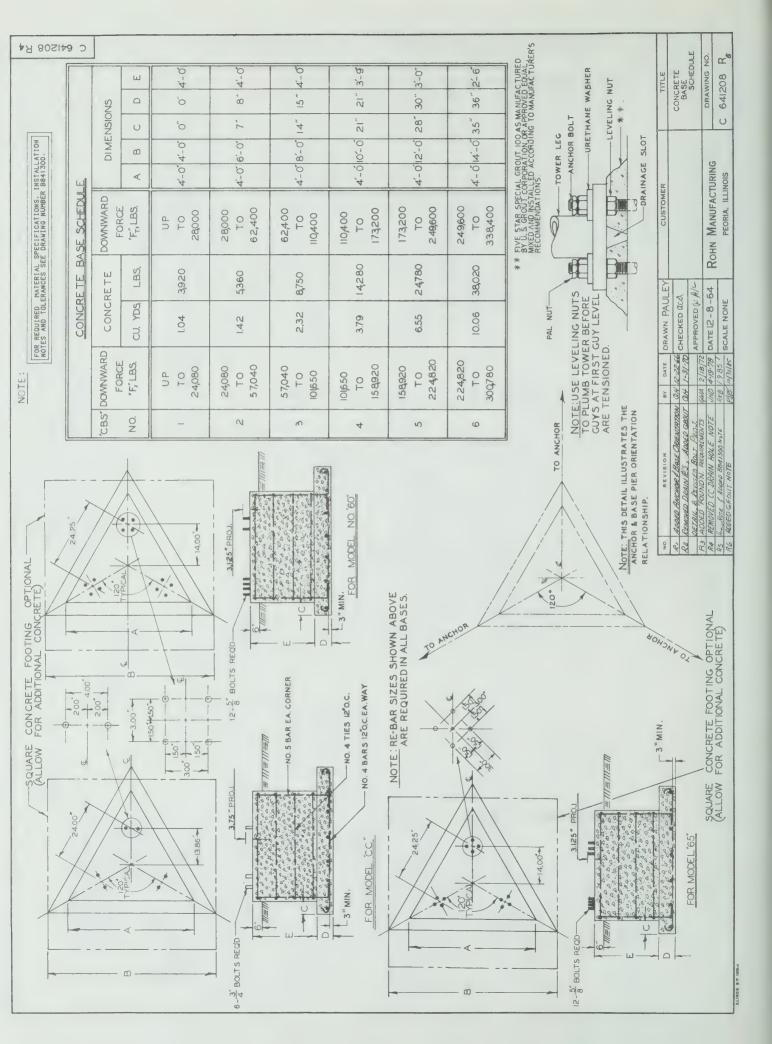
JENERAL NOTES.

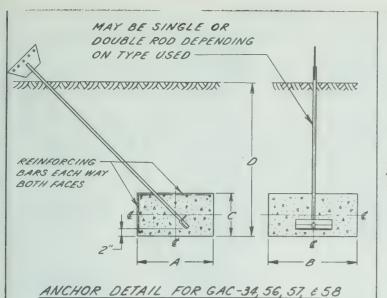
BUILDING CODES.

SPECIFICATION, INSTALLATION

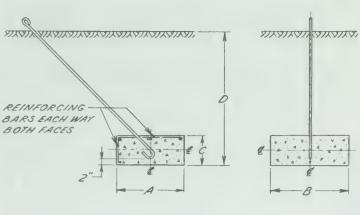








SHOWN ON DWG. NO. C-660415R2



ANCHOR DETAIL FOR GAC-25

RY NOTE: DUE TO VARIABLES INVOLVED IN ROOF AND OTHER INSTALLATIONS, IT SHALL BE THE CUSTOMER'S OR INSTALLER'S RESPONSIBILITY TO PROVIDE STRUCTURALLY ADEQUATE SUPPORTS FOR PIER & ANCHOR CONNECTIONS. IT MAY ALSO BE NECESSARY FOR THE CUSTOMER OR INSTALLER TO SECURE THE SERVICE OF A LOCAL ENGINEER TO DETERMINE THAT INSTALLATION COMPLIES WITH LOCAL BUILDING CODES.

GENERAL NOTES <

FOR REQUIRED MATERIAL SPECIFICATIONS, INSTALLATION NOTES AND TOLERANCES SEE DRAWING NUMBER B84/300.

1. MINIMUM 1/2" DIAMETER REINFORCING BARS IN ALL ANCHORS WITH
MAXIMUM SPACING OF 12" EXCEPT NO. 10 BLOCK MAXIMUM SPACING OF 6".

			CONC	CRETE	ANCH	HOR DA	TA			
DEPTH, D (FT.)	ROD NO.	BLOCK NO.	ANCHOR A	DIMENSIO B	NS (FT.)	WEIGHT CONCRETE (LBS)	CONCRETE (CU. YDS.)	UPLIFT * CAPACITY(LBS)	LATERAL CAPACITY (LBS.)	
		30	1.5	1.5	/	310	.08	900	1,500	
		36	2	2	/	560	.15	1,320	2,000	
3	3 GAC-25	3 c	2.5	2.5	/	870	.23	1,810	2,500	
		30	3	3	/	1,260	. 33	2,535	3,000	
		3 <i>e</i>	3	4	/	1,680	. 44	3,020	4,000	
		40	3	3	1.5	1,890	.50	3,490	5,850	
		46	3	4	1.5	2,520	.67	4,360	7,800	
4	GAC-34	40	3	5	1.5	3,150	.84	4,985	9,750	
			40	3	6	1.5	3,780	1.00	6,090	11,700
		4e	4	6	1.5	5,050	1.33	7,660	11,700	
		60	3	4	1.5	2,520	.67	10,035	12,600	
6	6	GAC-56	66	3	5	1.5	3,150	.84	11,600	15,750
	GAC-36	60	3	6	1.5	3,780	1.00	13,150	18,900	
		60	4	6	1.5	5,050	1.33	15,850	18,900	
		80	3	5	1.5	3,150	.84	22,150	21,750	
0	CAC 57	86	3	6	1.5	3,780	1.00	24,700	26,100	
8	GAC-57	8c	4	6	1.5	5,050	1.33	28,500	26,100	
		80	6	6	2.0	10,800	2.67	33,380	33,600	
		100	3	6	2.0	5,040	1.33	37,450	43,200	
		106	4	6	2.0	6,720	1.78	42,700	43,200	
10	GAC-58	10c	4	7	2.0	7,840	2.07	46,800	50,400	
		100	5	7	2.0	9,800	2.59	52,350	50,400	
		10e	5	9	2.0	12,600	3.33	61,700	64,800	

\* INCLUDES SAFETY FACTOR OF 2

\* \* NORMAL SOIL IS A COHESIVE TYPE SOIL WITH A HORIZONTAL
BEARING CAPACITY OF 400 POUNDS PER SQUARE FOOT PER
LINEAL FOOT OF DEPTH. ROCK, NON-COHESIVE SOILS,
OR SATURATED OR SUBMERGED SOILS ARE NOT TO BE
CONSIDERED AS NORMAL.

RIZ REV GEN NOTE & ADDED BOALSOO' NOTE 19.88 RRB REVISIONS

RIJ REVISED ANCHOR DETAIL DING. NO. 8-18.77 RLH

RIJ REVISED BOSIGN NOTE 1. 4 TITLE BLOCK 11-21-74 WARL

RIJ REVISED FOR EIA RS - 222-8 4/4/73 GLS

NO. DESCRIPTION DATE 8Y

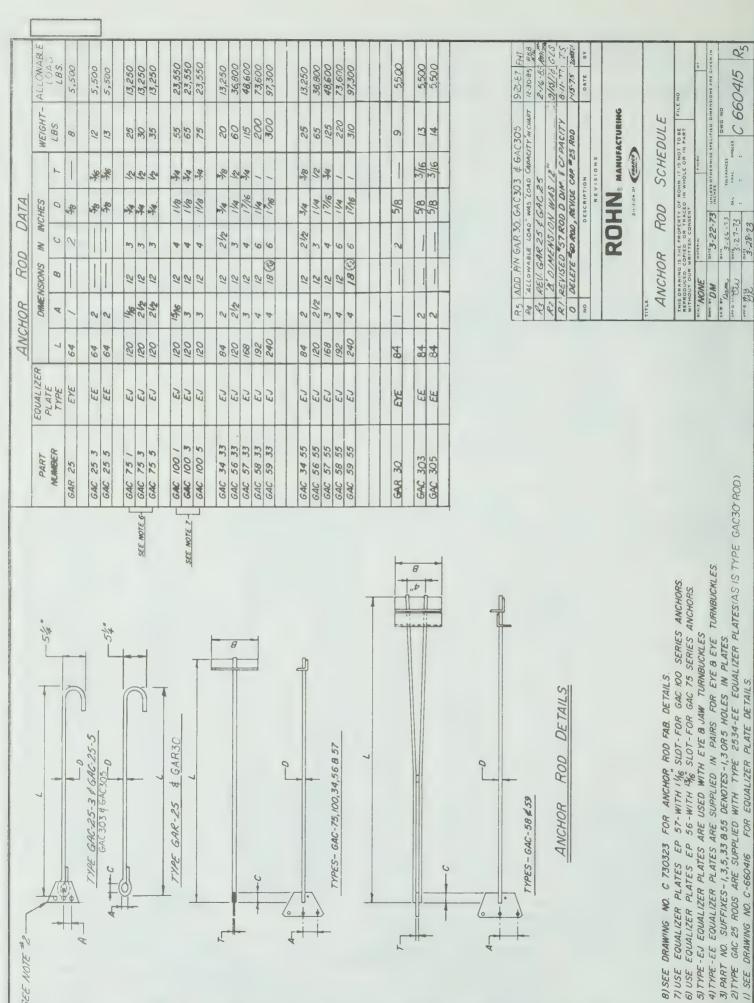
ROHN MANUFACTURING

STANDARD CONCRETE ANCHORS

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\*\*CALL\*\*

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SEE NOTE #

DRAWING NO. C-660416 33S (1

PRINTIED IN U.

### ASSEMBLY BOLT INSTALLATION:

ALL TOWER ASSEMBLY BOLTS ARE TO BE INSERTED OUT AND/OR UP (I.E. WITH NUTS AND PAL NUTS ON OUTSIDE OF TOWER FACE AND/OR ON TOP OF FLANGE PLATES) UNLESS PROHIBITED BY LACK OF CLEARANCE.

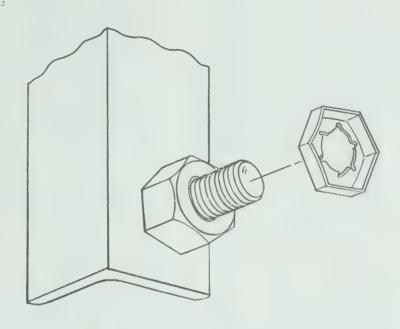
ALL ASSEMBLY AND ANCHOR BOLTS ARE TO BE TIGHTENED IN ACCORDANCE WITH ANSI/EIA-222-D SECTION 1.1.3.2 - (WHERE HIGH-STRENGTH BOLTS ARE USED FOR BEARING-TYPE CONNECTIONS, AS A MINIMUM, THE BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED IN THE AUGUST 14, 1980, AISC, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".),

FLAT WASHERS ARE TO BE INSTALLED WITH BOLTS OVER SLOTTED HOLES.

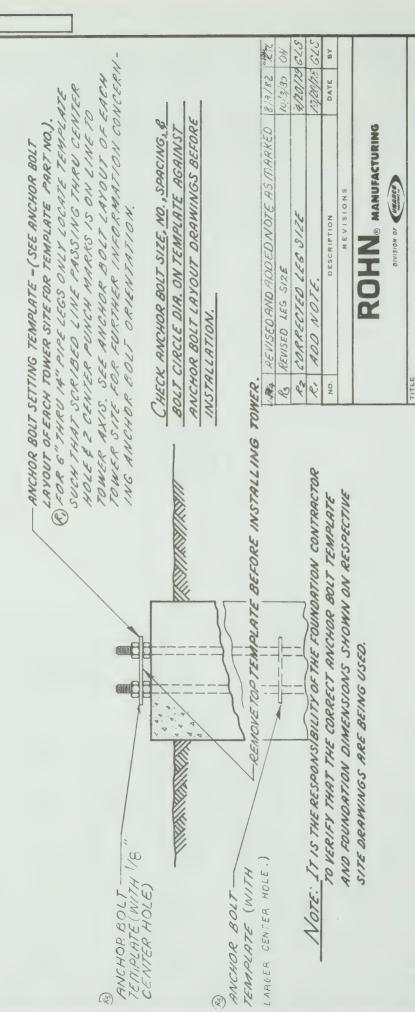
CAUTION: DO NOT OVER-TORQUE! GALVANIZING ON BOLTS, NUTS AND STEEL PARTS MAY ACT AS A LUBRICANT, THUS OVER-TIGHTENING MAY OCCUR AND MAY CAUSE BOLTS TO CRACK OR SNAP OFF.

### PAL NUT INSTALLATION:

PAL NUTS ARE TO BE INSTALLED AFTER NUTS ARE TIGHT AND WITH EDGE LIP OUT. (SEE PICTURE.) PAL NUTS NOT REQUIRED WHEN SELF-LOCKING NUTS ARE PROVIDED.



UPGRADE FOR	EIA REV.	D		12-29-87	FHT/JH
No. A Revision Description	on			<b>▲</b> Date	<b>≜</b> By
		Unarc	o-Rohn		8
		Division of Una	rco Industries, Inc.		
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Checked by Approved by Engineering	Date 7-5-79 Date 7-5-79 Date	Unless otherwis Tolerances Decimals  Material This drawing is	Fractions  Finish  the property of Una	Angle ± Weigh	inches
Checked by Approved by Engineering	Date 7-5-79 Date 7-5-79	Unless otherwis Tolerances Decimals  Material This drawing is reproduced, co	Fractions  Finish  the property of Unapied or traced in wh	Angle ± Weigh	inches
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UNLESS OTHERWISE SPECIFIED. DIMENSIONS ARE GIVEN IN INCHES. ANCHOR BOLT TEMPLATE INSTALLATION THIS DRAWING IS THE PROPERTY OF ROHN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRACED IN WHOLE OR IN PART WITTEN CONSENT. ANGLES TOLERANCES DATE 9-7-73 DATE -13-73 DAY-13-73 P-12-73 DWN. 87 0 14. APP'D ENGRG. CKD. 87 7.5. SCALE > 12-29-87 FHT/JHD

PRINTED IN U.S.A.

REVISED ANCHOR ISOLT TEMPLATES

# NOTES STANDARD FOUNDATION

FOUNDATION DESIGNS ARE IN ACCORDANCE WITH ANSI/EIA-222-D, "STRUCTURAL", STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES", SECTION 7. FOR "NORMAL" SOIL CONDITION. "NORMAL" SOIL IS DEFINED OF AS DRY, COHESIVE SOIL WITH AN ALLOWABLE NET VERTICAL BEARING CAPACITY OF 4000 PSF (192 kPa) AND ALLOWABLE NET HORIZONTAL PRESSURE OF 400 A MAXIMUM OF 4000 FSF (192 kPa).

THE RURCHASER MUST VERIFY THAT ACTUAL SITE SOIL PARAMETERS MEET OR ECCEDE E.I.A. "NORMAL" SOIL PARAMETERS AND THAT THE DEPTH OF STANDARD FOUNDATIONS ARE ADDEGUATE BASED ON THE FROST PERCERATION AND/OR ZONE OF SEASONAL MOISTURE VARIATION AT THE SITE, FOUNDATION DESIGN MODIFICATIONS MAY BE REQUIRED IN THE EVENT "NORMAL" SOIL PARAMETERS ARE NOT FOUNDATION DESIGNS ASSUME FIELD INSPECTIONS WILL BE PERFORMED BY FOUNDATION DESIGNS ASSUME FIELD INSPECTIONS WILL BE PERFORMED BY INSTAURATION METHODS AND ASSUMED DESIGN PARAMETERS ARE ACCEPTABLE BASED ON THE CONDITIONS EXISTING AT THE SITE. ď

WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES, SAFETY REGULATIONS AND UNLESS OTHERWISE NOTED, THE LATEST REVISION OF ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION.

GR B7 ANCHOR BOLTS SHALL MET OR EXCEED THE REQUIREMENTS OF ASTM A193 AND A320 GR LT AND SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH).

PAL NUTS OF ANCO NUTS SHALL BE INSTALLED ON ALL ANCHOR BOLTS. Ġ

CONCRETE MATERIALS SHALL CONFORM TO THE APPROPRIATE STATE REQUIREMENTS FOR EXPOSED STRUCTURAL CONCRETE AND SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI (20.7 MPa) IN 28 DAYS. V.

PROPORTIONS OF CONCRETE MATERIALS SHALL BE SUITABLE FOR THE INSTALLATION METHOD UTILIZED AND SHALL RESULT IN DURABLE CONCRETE FOR RESISTANCE TO LOCAL ANTICIPATED AGGRESSIVE ACTIONS INCLUDING FREEZING AND THAWING. Ø

MAXIMUM SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR ONE-THIRD CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING. 9

REINFORCEMENT SHALL BE DEFORMED AND CONFORM TO THE REQUIREMENTS OF ASTM ABIS GRADE 60 INCLUDING SUPPLEMENTARY REQUIREMENTS SI. 0

TO RETAIN PROPER DIMENSIONS DURING OF CONCRETE. REINFORCING CAGES SHALL BE BRACED HANDLING AND THROUGHOUT PLACEMENT

WELDING IS PROHIBITED ON REINFORCING STEEL AND EMBEDMENTS. NW

MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3 INCHES (76 mm) UNLESS OTHERWISE NOTED. APPROVED SPACERS SHALL BE USED TO INSURE A 3 INCH (76 mm) MINIMUM COVER ON REINFORCEMENT.

CONCRETE COVER FROM TOP OF FOUNDATION TO ENDS OF VERTICAL REINFORCEMENT SHALL NOT EXCEED 3 INCHES (31 mm). 4

Z SPACERS SHALL BE ATTACHED INTERWITTENTLY THROUGHOUT THE ENTIRE LENGTH OF VERTICAL REINFORCING CAGES TO INSURE CONCENTRIC PLACEMENT OF CAGES EXCAVATIONS. in

FOUNDATION DESIGNS ASSUME STRUCTURAL BACKFILL TO BE COMPACTED IN B INCH (200 mm) MAXIMUM LAYERS TO 95% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM DE9B, ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16 KN/m3). 6.

FOUNDATION DESIGNS ASSUME LEVEL GRADE AT TOWER SITE 17.

- FOUNDATION INSTALLATION SHALL BE SUPERVISED BY PERSONNEL KNOWLEDGEABLE AND EXPERIENCED WITH THE PROPOSED FOUNDATION TYPE, CONSTRUCTION SHALL BE IN ACCORDANCE WITH GENERALLY ACCEPTED INSTALLATION PRACTICES. 8
- FOR FOUNDATION AND ANCHOR TOLERANCES SEE DRAWING ABIO214, 19.
- LOOSE MATERIAL SHALL BE REMOVED FROM BOTTOM OF EXCAVATION PRIOR T CONCRETE PLACEMENT, SIDES OF EXCAVATION SHALL BE ROUGH AND FREE LOOSE CUTTINGS,

70 0F

- 9 CONCRETE SHALL BE PLACED IN A MANNER THAT WILL PREVENT SEGREGATION CONCRETE MATERIALS AND OTHER OCCURRENCES WHICH MAY DECREASE THE STRENGTH OR DURABILITY OF THE FOUNDATION. 21.
- WITHOUT TIES, FREE FALL CONCRETE MAY BE USED PROVIDED FALL IS VERTICAL DOWN WI' HITTING SIDES OF EXCAVATION, FORMWORK, REINFORCING BARS, FORM TIL GONCRETE FALL THROUGH WATER. 22
  - CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL EXCEPT FOR PIERS OF PIER AND PAD FOUNDATIONS, FORMS FOR PIERS SHALL BE REMOVED PRIOR TO PLACING STRUCTURAL BACKFILL. 23.
- CONSTRUCTION JOINTS AT BASES OF PIERS FOR PIER AND PAD FOUNDATIONS SHALL BE INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF 1/4 INCH (6 mm). FOUNDATION DESIGNS ASSUME NO OTHER CONSTRUCTION JOINTS. 24.
- TOP OF FOUNDATION OUTSIDE LIMITS OF ANCHOR BOLTS SHALL BE SLOPED TO DRAIN WITH A FLOATED FINISH. AREA INSIDE LIMITS OF ANCHOR BOLTS SHALL BE LEVEL WITH A SCRATCHED FINISH. 25.
- mm) 61 X mm EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" X 3/4" (19 MINIMUM 26.

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BB4 | 300R5

2-2-88

### FOUNDATION AND ANCHOR TOLERANCES

### ALL TOWERS

- 1. CONCRETE DIMENSIONS PLUS OR MINUS I" (25 mm).
- 2. DEPTH OF FOUNDATION PLUS 3" (76 mm) OR MINUS O".
- 3. DRILLED FOUNDATIONS OUT OF PLUMB 1.0 DEGREE.
- 4. REINFORCING STEEL PLACEMENT PER A.C.I. 301,
- 5. PROJECTION OF EMBEDMENTS PLUS OR MINUS 1/8" (3 mm).
- 6. VERTICAL EMBEDMENTS OUT OF PLUMB 1/2 DEGREE.

### SELF-SUPPORTING TOWERS

- 7. FACE SPREAD DIMENSION CENTER TO CENTER OF ANCHOR BOLT CIRCLES PLUS OR MINUS 1/16" (2 mm) OR 1/16" (2 mm) PER 20 FT (6 m) OF FACE SPREAD.
- 8. MAXIMUM DISTANCE FROM CENTERLINE OF ANCHOR BOLTS TO CENTERLINE OF FOUNDATION 1/24 OF PIER DIAMETER UP TO A MAXIMUM OF 2" (51 mm).
- 9. MAXIMUM DIFFERENCE BETWEEN ANY TWO FOUNDATION ELEVATIONS 1/2" (13 mm).
- 10. ANCHOR BOLT SPACING PLUS OR MINUS 1/16" (2 mm).
- II. ANCHOR BOLT CIRCLE ORIENTATION PLUS OR MINUS 1/4 DEGREE.
- 12. ANCHOR BOLT CIRCLE DIAMETER PLUS OR MINUS 1/16" (2 mm).

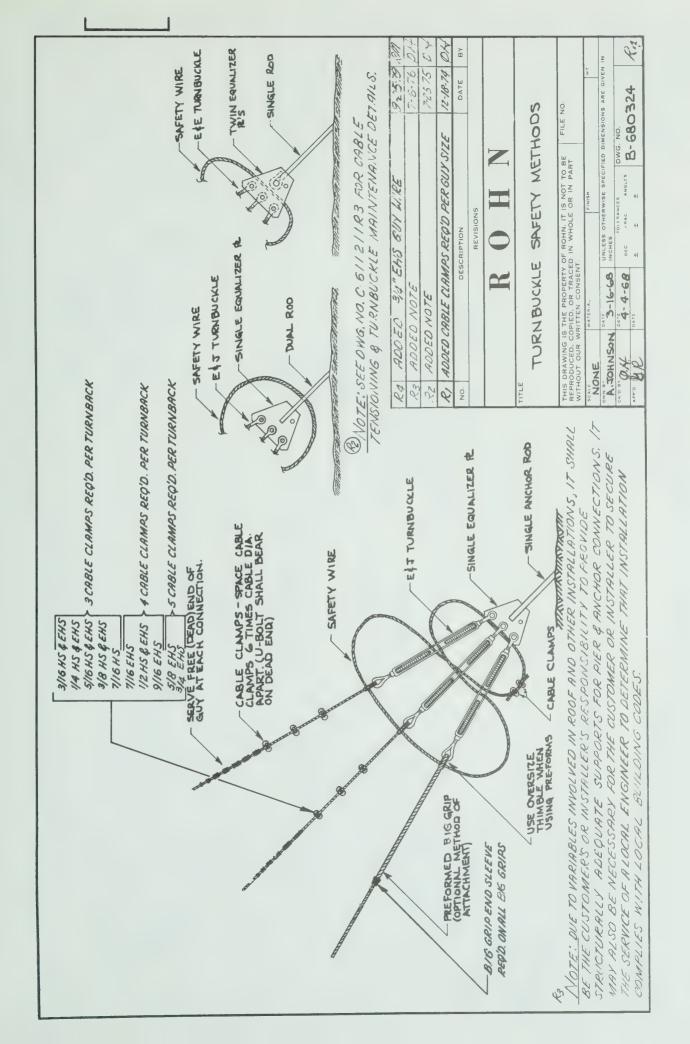
### BUYED TOWERS

- 13. GUY RADIUS PLUS OR MINUS 3 PERCENT OF TOWER HEIGHT.
- 14. ANCHOR ELEVATION 3 PERCENT OF TOWER HEIGHT ABOVE OR BELOW TOWER BASE.
- 15. ANCHOR ALIGNMENT (PERPENDICULAR TO GUY RADIUS) PLUS OR MINUS O. I DEGREES.
- 16. ANCHOR ROD SLOPE PLUS OR MINUS 1.0 DEGREE.
- 17. GUY INITIAL TENSION PLUS OR MINUS 10 PERCENT OF VALUE SPECIFIED ON TOWER ASSEMBLY DRAWING.

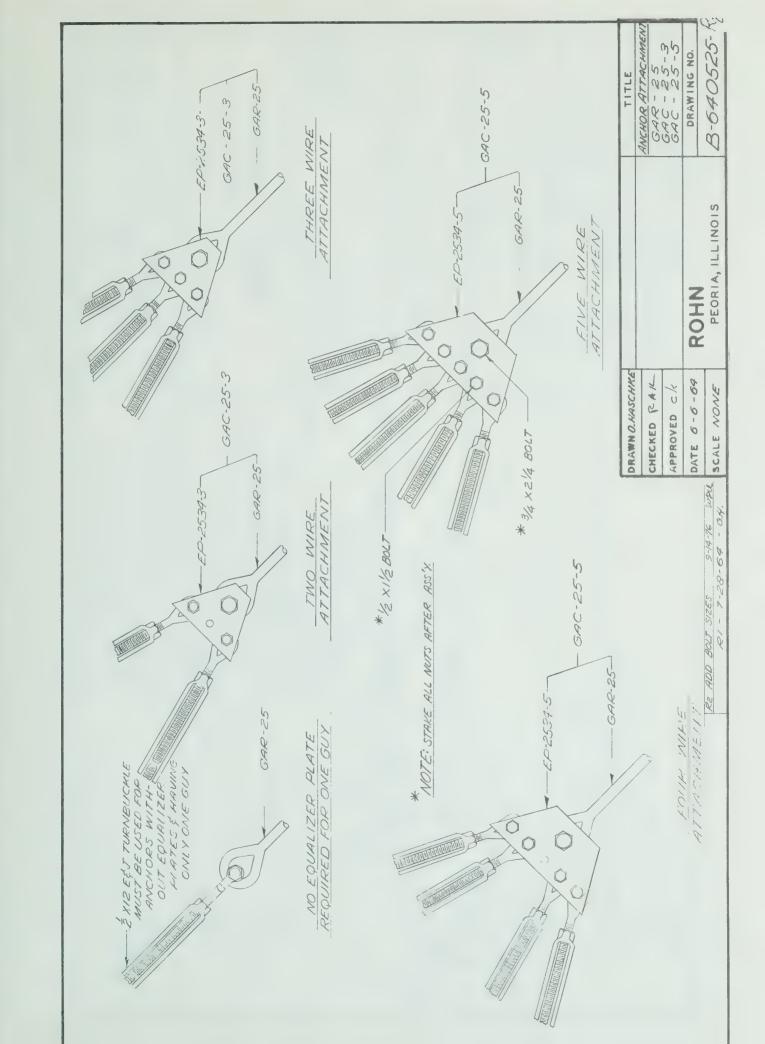
### WARNING !!!

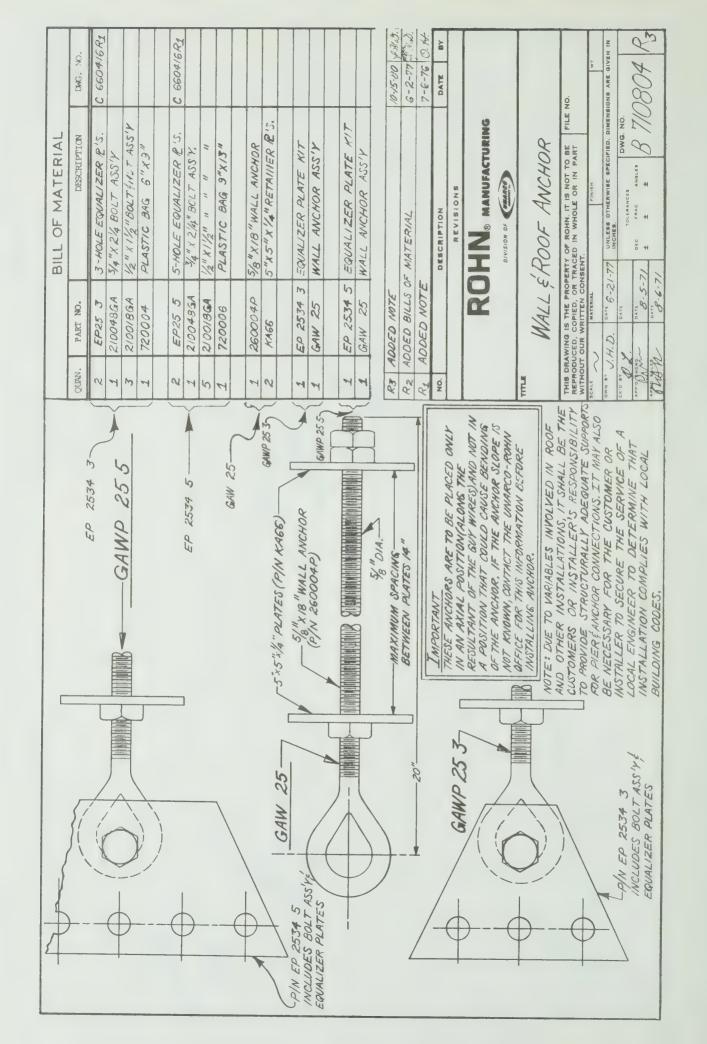
AFTER ANCHOR BOLTS ARE INSTALLED AND CONCRETE HAS TAKEN ITS INITIAL SET, ANCHOR BOLTS MUST NOT BE MOVED, BENT OR REALIGNED IN ANY MANNER. A NUT LOCKING DEVICE MUST BE INSTALLED ON ALL ANCHOR BOLTS.

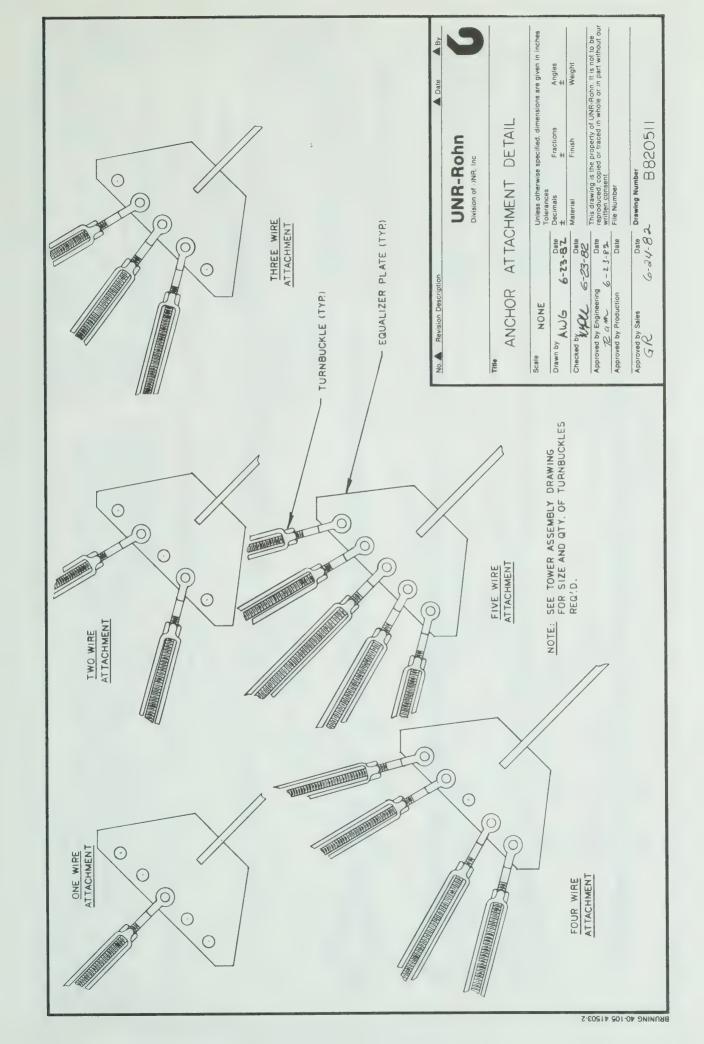
R3 REDRAWN & REVISED CSR	9/24/87			
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CHECKED BY: KIZ DATE: 9	9-25-87	TITLE:		
	-25-87			
APP'D. SALES: & DATE: 2	2-12-88	FOUNDATION	AND ANCHOR	TOLERANCES
DRAWING NUMBER: A810214R	73			

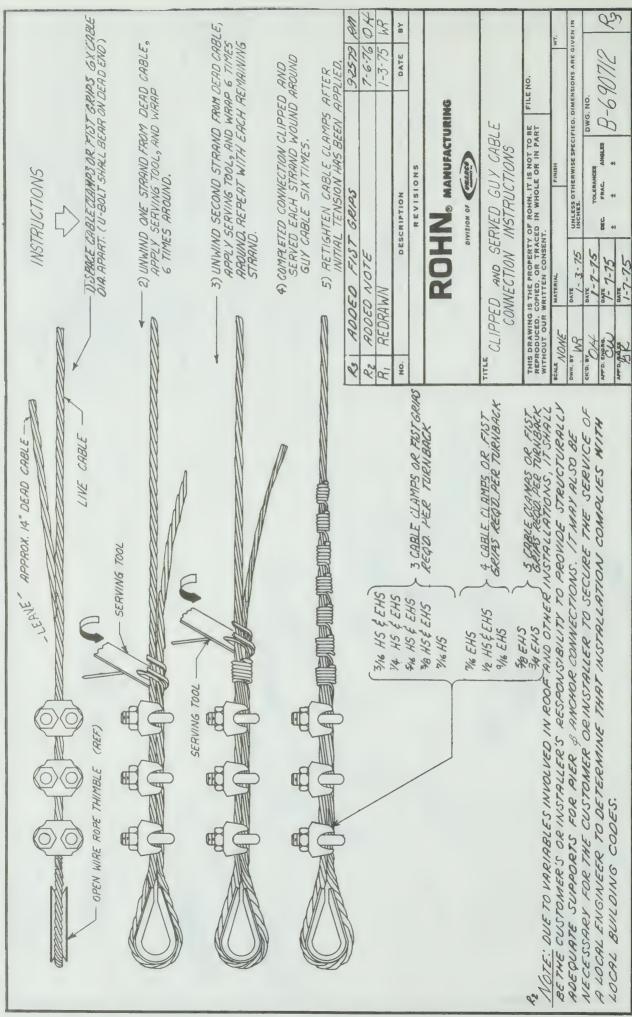




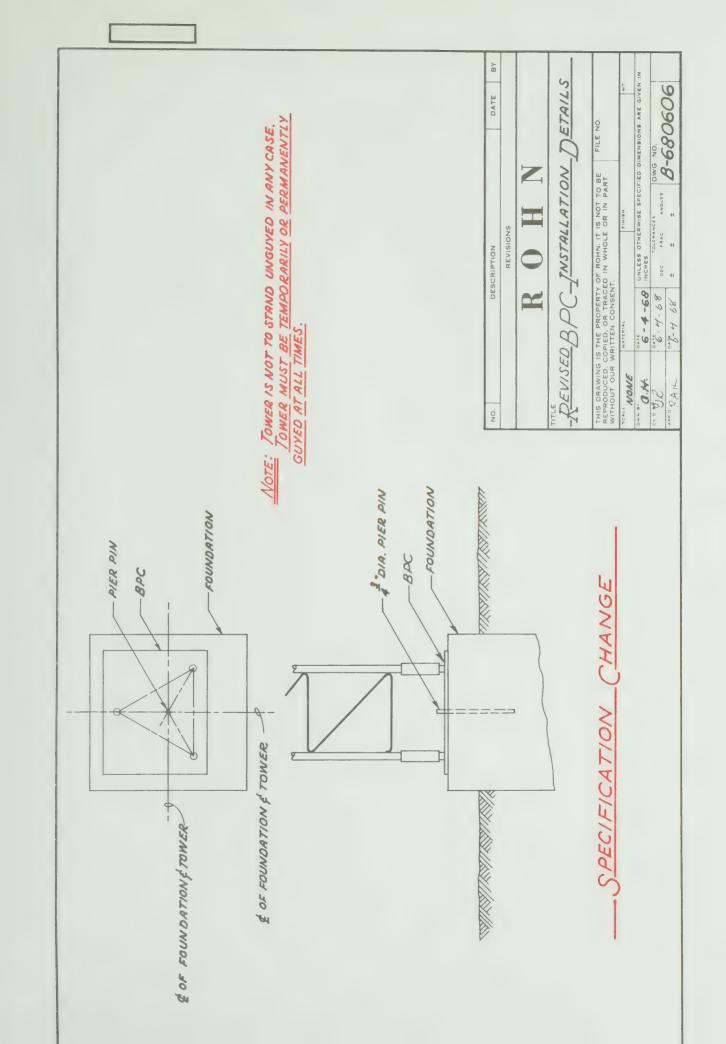


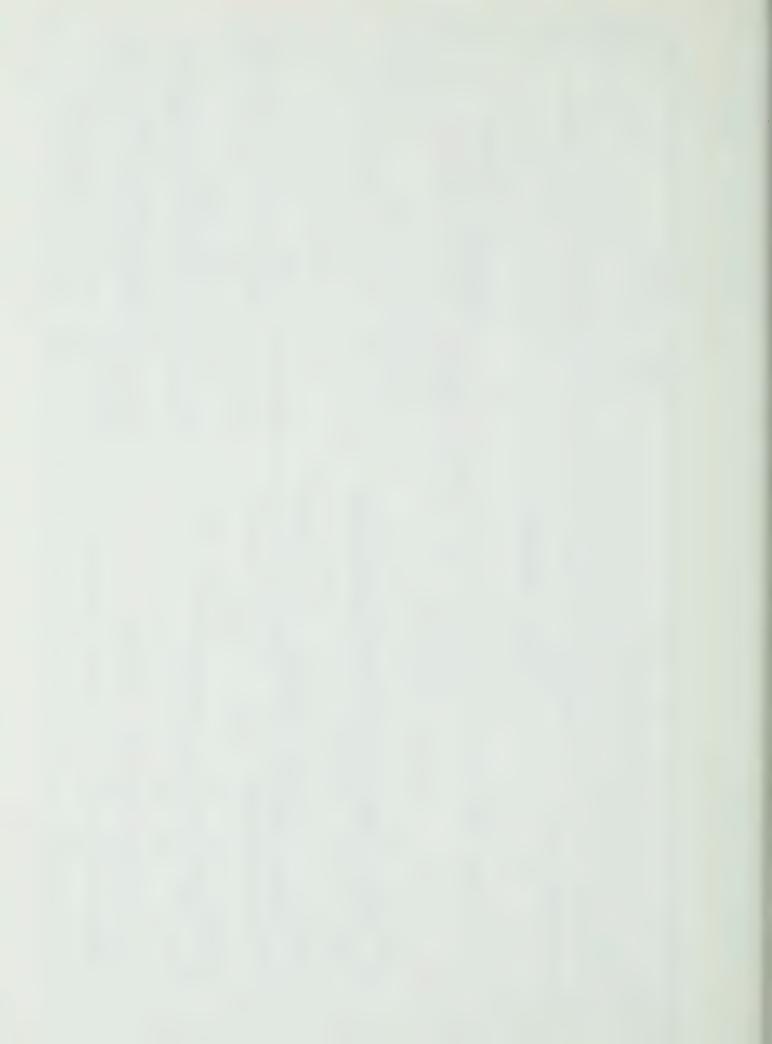






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### CROSS REFERENCE SHEET

### SSV TOWER

OLD LEG NO.	NEW LEG MO.	OLD LEG MO.	NEW LEG NO.
4:1	VL345	9NHST	VL369
4NST		9NHST w/step	
	VL337		VL369S
4NC	VL338	10N	VL359
41NB	VL339	10N w/step	VL359S
4MA	VL340	10NST	VL370
5.N	VL346	10NST w/step	VL370S
5MST	VL341	10NH	VL351
511C	VL342	10NH w/step	VL351S
5NB	VL343	10NHST	VL371
5NA	VL344	10NHST w/step	VL371S
6N	VL347	11N	VL352
6N w/step	VL347S	11N w/step	VL352S
6:IST	VL365	11NST	VL372
6NST w/step	VL365S	11NST w/step	VL372S
7N	VL348	12N	VL360
7N w/step	VL348S	12NST	VL373
7NST	VL366	12NH	VL353
7NST w/step	VL366S	12NHST	VL374
811	VL349	13N	VL361
3N w/step	VL349S	13NH	VL354
8°!ST	VL367	1414	VL362
8NST w/step	VL367S	<b>14</b> NH	VL355
9N	VL358	15N	VL363
9N w/step	VL358S	15NH	VL356
9NST	VL368	<b>1</b> 6N	VL363
9NST w/step	VL363S	16NH	VL356
9NH	VL350		
9NH w/step	VL350S		

### CROSS REFERENCE SHEET

### #80 TOWER

NEW SECTION PART NO.	OLD SECTION PART NO.	NEW LEG NO.	OLD LEG NO.	WT.	NEW SECTION PART NO.	OLD SECTION PART NO.	NEW LEG NO.	OLD LEG NO.	WT.
83P 83PS	83P 83P w/steps	KL56 KL56 KL56S	83P 83P	420 425	83PX 83PXS	83PX 83PX w/steps	KL58 KL58 KL58S	83PX 83PX	560 565
83PA 83PAS	83P - 5 <sup>†</sup> lg. 83P - 5 <sup>†</sup> lg. w/steps	KL98 KL98 KL98S	83P 83P	165 167	83PXA 83PXAS	83PX - 5' lg. 83PX - 5' lg. w/steps	KL100 KL100 KL100S	83PX 83PX	192 194
83PB 83PBS	83P - 10' lg. 83P - 10' lg. w/steps	KL126 KL126 KL126S	83P 83P	249 252	83PXB 83PXB\$	83PX - 10' lg. 83PX - 10' lg. w/steps	KL128 KL128 KL128S	83PX 83PX	309 312
83PC 83PCS	83P - 15' lg. 83P - 15' lg. w/steps	KL154 KL154 KL154S	83P 83P	336 341	83PXC 83PXCS	83PX - 15' lg. 83PX - 15' lg. w/steps	KL156 KL156 KL156S	83PX 83PX	426 431
83PH 83PHS	83PH 83PH w/steps	KL57 KL57 KL57S	83PH 83PH	510 515	83PHX 83PHXS	83PHX 83PHX w/steps	KL59 KL59 KL59S	83PHX 83PHX	650 655
83PHA 83PHAS	83PH - 5' lg. 83PH - 5' lg. w/steps	KL99 KL99 KL99S	83PH 83PH	189 191	83PHXA 83PHXAS	83PHX - 5 <sup>†</sup> lg. 83PHX - 5 <sup>†</sup> lg. w/steps	KL101 KL101 KL101S	83PHX 83PHX	216 · 218
83PHB 83PHBS	83PH - 10 <sup>†</sup> lg. 83PH - 10 <sup>†</sup> lg. w/steps	KL127 KL127 KL127S	83PH 83PH	294 297	83PHXB 83PHXBS	83PHX - 10† lg. 83PHX - 10† lg. w/steps	KL129 KL129	83PHX 83PHX	354 357
83PHC 83PHCS	83PH - 15' lg. 83PH - 15' lg. w/steps	KL155 KL155	83PH 83PH	402 407	83PHXC 83PHXCS	83PHX - 15' lg. 83PHX - 15' lg. w/steps	KL129S KL157 KL157	83PHX 83PHX	492 497
84 84S	84 84 w/steps	KL155S KL60 KL60 KL60S	84 84	570 575	84X 84XS	84X 84X w/steps	KL157S KL62 KL62 KL62S	84X 84X	700 705
84A 84AS	84 - 5† lg. 84 - 5† lg. w/steps	KL102 KL102 KL102S	84 84	201 203	84XA 84XAS	84X - 5' lg. 84X - 5' lg. w/steps	KL104 KL104 KL104S	84X 84X	228 230
84B 84BS	84 - 10† lg. 84 - 10† lg. w/steps	KL130 KL130 KL130S	84 84	318 322	84XB 84XBS	84X - 10† lg. 84X - 10† lg. w/steps	KL132 KL132 KL132S	84X 84X	375 378
84C 84CS	84 - 15' lg. 84 - 15' lg. w/steps	KL158 KL158 KL158S	84 84	438 443	84XC 84XCS	84X - 15' lg. 84X - 15' lg. w/steps	KL160 KL160 KL160S	84X 84X	525 530
84H 84HS	84H 84H w/steps	KL61 KL61 KL61S	84H 84H	680 685	84HX 84HXS	84HX 84HX w/steps	KL63 KL63 KL63S	84HX 84HX	800 805
84HAS	84H - 5' Ig. 84H - 5' Ig. w/steps	KL103 KL103 KL103S	84H 84H	228 230	84HXA 84HXAS	84HX - 5 <sup>†</sup> lg. 84HX - 5 <sup>†</sup> lg. w/steps	KL105 KL105 KL105S	84HX 84HX	261 263
84HB 84HBS	84H - 10' lg. 84H - 10' lg. w/steps	KL131 KL131 KL131S	84H 84H	381 384	84HXB 84HXBS	84HX - 10' lg. 84HX - 10' lg. w/steps	KL133 KL133 KL133S	84HX 84HX	438 441
84HC 84HCS	84H - 15' lg. 84H - 15' lg. w/steps	KL159 KL159 KL159S	84H 84H	528 533	84HXC 84HXCS	84HX - 15' lg. 84HX - 15' lg. w/steps	KL161 KL161 KL161S	84HX 84HX	615 620
85 85S	85 85 w/steps	KL64 KL64 KL64S	85 85	650 655	85X 85XS	85X 85X w/steps	KL66 KL66 KL66S	85X 85X	790 795
85A 85AS	85 - 5† lg. 85 - 5† lg. w/steps	KL106 KL106 KL106S	85 85	255 257	85XA 85XAS	85X - 5' lg. 85X - 5' lg. w/steps	KL108 KL108 KL108S	85X 85X	282 284
85B 85BS	85 - 10' lg. 85 - 10' lg. w/steps	KL134 KL134 KL134S	85 85	402 405	85XB 85XBS	85X - 10† lg. 85X - 10† lg. w/steps	KL136 KL136 KL136S	85X 85X	459 462
85C 85CS	85 - 15' lg. 85 - 15' lg. w/steps	KL162 KL162 KL162S	85 85	546 551	85XC 85XCS	85X - 15' lg. 85X - 15' lg. w/steps	KL164 KL164 KL164S	85X 85X	633 638
85H 85HS	85H 85H w/steps	KL65 KL65 KL65S	85H 85H	810 815	85HX 85HXS	85HX 85HX w/steps	KL67 KL67 KL67\$	85HX 85HX	950 955
85HA 85HAS	85H - 5' lg. 85H - 5' lg. w/steps	KL107 KL107 KL107S	85H 85H	303 305	85HXA 85HXAS	85HX - 5' lg. 85HX - 5' lg. w/steps	KL109 KL109 KL109S	85HX 85HX	330 332
85HB 85HBS	85H - 10' lg. 85H - 10' lg. w/steps	KL135 KL135 KL135S	85H 85H	489 492	85HXB 85HXBS	85HX - 10' lg. 85HX - 10' lg. w/steps	KL137 KL137 KL137S	85HX 85HX	546 549
85HCS	85H - 15' lg. 85H - 15' lg. w/steps	KL163 KL163 KL163S	85H 85H	675 680	85HXC 85HXCS	85HX - 15' lg. 85HX - 15' lg. w/steps	KL165 KL165 KL165S	85HX 85HX	762 767
845H 845HS	845H 845H w/steps	KL68 KL68 KL68S	845H 845H	695 700	845HX 845HXS	845HX 845HX w/steps	KL69 KL69 KL69S	845HX 845HX	805 810

### ROHN SPECIAL SERVICES AVAILABLE

Site Inspections or Supervision (Domestic)		\$400.00 Per Man Day Plus Travel Expenses
Site Supervision (International)		\$800.00 Per Man Day Plus All Expenses **
Special Concrete Foundation Design Drawings and Calculations (Soil Analysis by Others) (Anchor Blocks, Base Piers, Pier & Pad, Drill & Bell, Mat, Rock)	Plus	\$400.00 Per Analysis \$150.00 Per Man Hour (\$500.00 Minimum)
Special Concrete & Piling Foundation Design Drawings and Calculations (Soil Analysis by Others) (Piling, Stub Anchors, Special Piers, Etc.)	Plus	\$500.00 Per Analysis \$150.00 Per Man Hour (\$750.00 Minimum)
Complete Detailed Analysis of Standard Catalog Towers with Back-Up Sheets (Projected Area, Brace & Leg Capacity, Misc. Details)		\$400.00 Per Analysis
Complete Detailed Analysis Non-Catalog Towers		\$2,000.00 Per Tower
Erection and Assembly Drawings	No Charge After Receip (4 Sets Maximum - \$50.00	
Sealed Design Drawings (except AK, HI, NV) (AK, HI, NV)		\$ 250.00 Per Tower 500.00 Per Tower
Sealed Catalog Drawings (except IL, AK, HI, NV (AK, HI, NV) (IL)	)	\$ 250.00 Per Tower 500.00 Per Tower No Charge
Shop Drawings (Fabrication Drawings)		Not Supplied

Contact Rohn Sales Personnel for engineering fees prior to issuance of purchase order.

\*\*Maximum of 8 weeks at one time on site and/or in transit from the U.S. Then 2 weeks leave time at same rates including travel expenses to and from U.S. (i.e. for every 8 weeks work outside U.S., charges will be made for 10 weeks, plus all expenses).

If outside source inspection, assembly, etc. is required prior to shipment of an order, \$50.00 per man hour (plus equipment time, if applicable) is chargeable, with \$300.00 as a minimum.

- NOTES: 1) Amounts noted above are net prices.
  - 2) Terms CIA or immediate invoice upon receipt of purchase order.
  - 3) Prices on engineering pertain to Rohn towers only.
  - 4) A man day (8 hours) begins when UNR-Rohn personnel leave factory (Peoria) and ends upon return.
  - 5) Other engineering services and studies available at \$150.00 per man hour plus a \$400.00 computer charge.
  - 6) Subject to change without notice.





ANSI/EIA-222-D-1986

APPROVED: OCTOBER 29, 1986

NOT EFFECTIVE UNTIL JUNE 1, 1987

### EIA STANDARD

STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES

EIA-222-D

(Revision of EIA-222-C)

NOVEMBER 1986



**Engineering Department** 

### ELECTRONIC INDUSTRIES ASSOCIATION

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This EIA Recommended Standard is considered to have international standardization implications, but the IEC activity has not progressed to the pointwhere a valid comparison between the EIA Recommended Standard and the IEC Recommendation can be made.

Published by

ELECTRONIC INDUSTRIES ASSOCIATION
Engineering Department
2001 Eye Street, N.W.
Washington, D.C. 20006

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### STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES

(From EIA Standard EIA-222-C and Standards Proposal No. 1658, formulated under cognizance of EIA Subcommittee TR-14.7.)

### OBJECTIVE

The objective of these standards is to provide minimum criteria for specifying and designing Steel Antenna Towers and Antenna Supporting Structures. These standards are not intended to replace or supersede applicable codes. The information contained in these standards was obtained from information and data as referenced and noted herein and represents in the judgement of the subcommittee the accepted industry practices for minimum standards for the design of Steel Antenna Supporting Structures. It is for general information only. While it is believed to be accurate, this information should not be relied upon for any specific application without competent professional examination and verification of its accuracy, suitability and applicability by a licensed professional engineer. These standards utilize wind loading criteria based on an annual probability and are not intended to cover all environmental conditions which could exist at a particular location.

These standards shall apply to Steel Antenna Towers and Antenna Supporting Structures for all classes of communications service. These include AM, CATV, FM, Microwave, TV, and VHF.

SCOPE

These standards describe the requirements for Steel Antenna Jowers and Antenna Supporting Structures.

### STRUCTURAL STANDARDS SONSIST OF

1.	MATERIAL	7.	FOUNDATION AND ANCHORS	M	10.2 Standard
	1.1 Standard		7.1 Definitions	1	10.3 Method of Measurement
2.	LOADING		7.2 Standard Foundations	11.	OPERATIONAL REQUIREMENTS
	2.1 Definitions		and Anchors		11.1 Definitions
	2.2 Nomenclature		7.3 Non-Standard Foundations		11.2 Standard
	2.3 Standard		and Anchors	12.	PROTECTIVE GROUNDING
	2.4 References		7.4 Foundation Drawings		12.1 Definitions
3.	STRESSES	8.	SAFETY FACTOR OF GUYS		12.2 Standard
	3.1 Standard		8.1 Definition	13.	CLIMBING AND WORKING FACILITIES
4.	MANUFACTURE AND WORKMANSHIP		8.2 Standard		13.1 Definitions
	4.1 Standard	9.	PRESTRESSING AND PROOF		13.2 Standard
5.	FACTORY FINISH		LOADING OF GUYS	14.	MAINTENANCE AND INSPECTION
	5.1 Standard		9.1 Definitions		14.1 Standard
6.	PLANS, ASSEMBLY TOLERANCES,		9.2 Standard	15.	ANALYSIS OF EXISTING TOWERS
	AND MARKING	10.	INITIAL GUY TENSION		AND STRUCTURES
	6.1 Standard		10.1 Definition		15.1 Standard

### APPENDICES

- A. Purchaser Checklist
- B. Design Wind Load on Typical Solid Microwave Antennas/Reflectors
- C. Allowable Twist & Sway Values for Parabolic Antennas, Passive Repeaters, and Periscope System Reflectors
- D. Allowable Twist & Sway Values for Dual Polarized Antennas or Single Polarized Antennas Expandable to Dual Polarization
- E. Tower Maintenance and Inspection Procedures
- F. Criteria for the Analysis of Existing Structures
- G. SI Conversion Factors

The above mentioned Structural Standards for Steel Antenna Towers and Antenna Supporting Structures are available direct from the Electronic Industries Association for \$18.00. These Standards are also available from Rohn, P. O. Box 2000, Peoria, IL 61656. The cost is \$18.00, postage paid.

### TOWER DESIGN INFORMATION

Rohn communication tower designs conform to E.I.A. RS-222-C. Tower design may or may not conform to local, state, or federal requirements.

Tower member design does not include stresses due to erection since erection equipment and conditions are unknown. UNR-Rohn assumes competent and qualified personnel will erect the tower.

For determining antenna torques and member sizes for microwave towers, UNR-Rohn requires tower layout and dish azimuths (site plan). For bidding purposes, if this information is not supplied, UNR-Rohn will design the tower members based on assumed values of antenna torque. When dish azimuths are specified without a tower orientation, the following tower orientation will be assumed:

- (a) For triangular guyed or self-supporting towers, UNR-Rohn will assume one leg or anchor pointing north and one face parallel to an east-west line.
- (b) For square towers, UNR-Rohn assumes faces parallel to east-west and north-south line.

Tower member sizes may change if final tower layout and dish azimuths (site plan) indicate antenna torques different from those assumed. Upon receipt of final tower layout and dish azimuths (site plan), UNR-Rohn will not perform re-engineering of the tower or change material unless specifically requested and paid for by the customer.

### COMMENTARY OF E.I.A. RS-222-C INTERPRETATION

### Section 6.1.1 - Foundation and Anchor Tolerances

UNR-Rohn does not include tolerances on foundation and anchor drawings because certain field conditions may require a deviation from specified tolerances. There are situations where tolerances may require a higher or lower value than those listed on the drawing. A certain amount of judgment must be left with the personnel supervising the construction. All construction is expected to be performed in a good workmanlike manner utilizing the most current and available methods and equipment.

Some general guidelines for allowable variances of the dimensions shown on the drawings are listed below which, in most cases, are satisfactory.

- 1. Concrete dimensions plus or minus 1"
- 2. Depth of foundation plus 3" or minus 0"
- 3. Reinforcing steel placement plus or minus 1/4"
- 4. Anchor bolt circle diameter plus or minus 1/32"
- 5. Anchor bolt circle orientation plus or minus .25 degree
- 6. Face spread dimension (center to center of anchor bolt circle) plus or minus 1/16"
- 7. Guy radius 3 per cent of tower height
- 8. Anchor elevation 3 per cent of tower height above or below tower base
- 9. Anchor alignment (perpendicular to guy radius) plus or minus .l degree
- 10. Anchor rod slope plus or minus 1 degree
- 11. Guy initial tension plus or minus 10 per cent of the value specified on the tower assembly drawing.

### Section 10.2 - Guy Initial Tension

Initial tension values specified on the tower assembly drawings are based on a temperature of 60 degrees Fahrenheit and a wind velocity of less than 10 miles per hour. Corrections for the initial tension values at the various temperatures and guy slopes can be interpolated from the chart below. Tower length changes due to changes in guy stresses and sag stresses have been neglected.

Guy Size	Temperature O F	Guy Level Elevation on Tower Ratio of Distance from Tower Base to Guy Anchor									
		.36	.58	.84	1.00	1.19	1.73				
	120	415	445	495	525	545	585				
	90	540	555	580	595	605	625				
1/4EHS	60	665	665	665	665	665	665				
	30	790	775	750	735	725	705				
	0	915	885	835	805	785	745				
	120	690	760	840	880	920	1000				
	90	905	940	980	1000	1020	1060				
5/16EHS	60	1120	1120	1120	1120	1120	1120				
	30	1335	1300	1260	1240	1220	1180				
	0	1550	1480	1400	1360	1320	1240				

### Commentary of E.I.A. RS-222-C Interpretation Cont'd.

		Guy Level Elevation on Tower  Ratio of Distance from Tower Base to Guy Anchor									
Guy Size	Temperature O F										
		.36	.58	.84	1.00	1.19	1.73				
	120	980	1050	1160	1210	1270	1380				
	90	1260	1295	1350	1375	1405	1460				
3/8EHS	60	1540	1540	1540	1540	1540	1540				
	30	1820	1785	1730	1705	1675	1620				
	0	2100	2030	1920	1870	1810	1700				
	120	1240	1360	1510	1600	1690	1840				
	90	1660	1720	1795	1840	1885	1960				
7/16EHS	60	2080	2080	2080	2080	2080	2080				
	30	2500	2440	2365	2320	2275	2200				
	0	2920	2800	2650	2560	2470	2320				
	120	1600	1760	1960	2070	2180	2380				
	90	2145	2225	2325	2380	2435	2535				
1/2EHS	60	2690	2690	2690	2690	2690	2690				
	30	3235	3155	3055	3000	2945	2845				
	0	3780	3620	3420	3310	3200	3000				
	120	2100	2310	2570	2700	2840	3100				
	90	2800	2920	3030	3100	3170	3300				
9/16EHS	60	3500	3500	3500	3500	3500	3500				
	30	4200	4100	3970	3900	3830	3700				
	0	4900	4690	4430	4300	4160	3900				
	120	2530	2790	3110	3270	3440	3760				
	90	3390	3520	3670	3760	3840	4000				
5/8EHS	60	4240	4240	4240	4240	4240	4240				
	30	5090	4960	4810	4720	4640	4480				
	0	5950	5690	5370	5210	5040	4720				

### Section 12.3 - Method of Determination (Tower Twist and Sway)

Paragraph 12.3.1 states that the preferred method of determining the tower twist and sway is the analytical method. Analytical methods have been used for many years by the tower industry and have proven to be satisfactory.

Due to the many unknown loading conditions (non-uniform wind loading, unusual topography, severe icing, tower maintenance, etc.) that may exist during the life of a communication tower, the guarantee for allowable twist and sway exists only for the customer's specified wind and ice load on an analytical method. Actual tests and field conditions may indicate results different from the analytical method.

### Section 13.2.2 - Climbing Facilities

This section requires a climbing facility designed to support 250 pounds concentrated live load. On towers, such as the #25, #45, #55, J, C, and D, the horizontal member used for climbing may not meet this 250 pound concentrated load criteria if verified by using engineering formulas. However, the steps for these towers have performed satisfactorily and to our knowledge do meet the intent of this section of E.I.A. by providing a safe climbing facility when so used.

### Section 13.2.2.2 - Step Bolts

It is UNR-Rohn's intent to meet the step bolt spacing requirements of this section. This section requires spacing of a minimum of 12 inches and a maximum of 18 inches. Due to large leg members and very thick flange plates on some heavy duty towers, this maximum 18 inch spacing may be exceeded near the flange plates. This spacing may exceed the 18 inch maximum by approximately 1 inch. If the customer feels this excess step bolt spacing will create problems, step bolts should be removed from the tower and an alternate climbing method used, such as a ladder. Due to the variable spacing of the step bolts along the height of the tower, UNR-Rohn recommends the customer install a safety climbing device on each leg that is to be climbed by the customer's trained personnel.

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One of the finest, most modern galvanizing plants in the Midwest. Can handle practically every type, kind and size item. Pickling and oiling available; also centrifugal processing. Get quotes on your needs now!

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35' x 4' x 6' 24' x 5' x 6'

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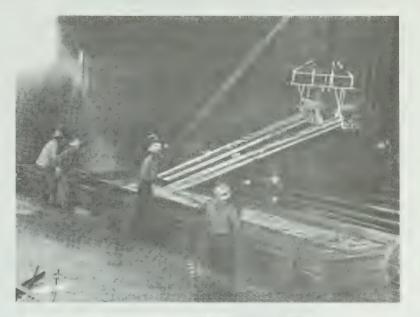
## OCALL ROHN &

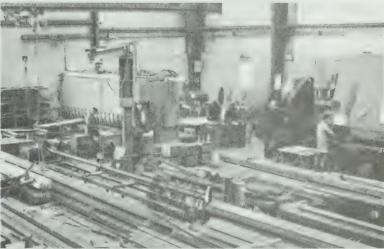
### Electric Welded Tubing

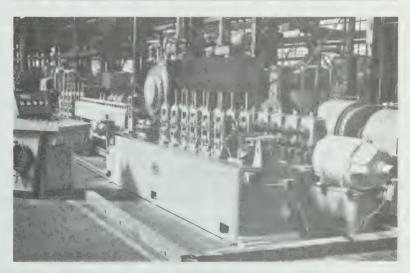
**ROHN** is a manufacturer of all sizes and types of black and galvanized electric welded steel tubing. Practically any need can be supplied whether large or small quantities. Immediate service, excellent shipping facilities, fleet of company owned trucks and very competitive prices. Check NOW and start saving money!



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Hot dip galvanizing is a process for rust-proofing iron and steel by the application of a coating of metallic zinc. It is a versatile process in that it is applicable to products of nearly all shapes and sizes, ranging from nails, nuts and bolts to large structural assemblies. On all steel parts, galvanizing provides long-lasting and economical protection against a wide variety of corrosive elements in the air, in water, or in the soil.

### Corrosion Resistance of Galvanized Steel

The use of zinc is unique among corrosion-protective methods. The zinc coat serves in a twofold capacity.

First—It protects the steel from corrosive attack in most atmospheres, acting as a continuous and lasting shield between the steel and the atmosphere so long as the zinc sheath is unbroken.

Second—As a galvanic protector sacrificing itself slowly in the presence of corrosive elements by continuing to protect the steel even when moderate-sized areas of bare metal have been exposed. This last ability results from the fact that zinc is more electro-chemically active than steel.

Of all industrial coating materials, zinc alone possesses this dual ability. With most protective coatings that act only as a barrier, rapid attack commences when exposure of the base metal occurs.



This is what happens at a small exposed area in a coating of tin on steel. Tin merely serves as a barrier until the coating is penetrated. Then, because of electrochemical activities, the steel protects the tin.



This is what happens at a small exposed area in a coating of zinc on steel. The zinc has a greater tendency to go into solution at the hands of the elements than the base metal steel. The zinc is consumed while the steel is protected from any attack.

The distance over which this galvanic protection is effective depends upon the environment. When completely and continuously wet, especially as by a strong electrolyte—e.g., sea water—relatively large areas of exposed steel will be protected so long as any zinc remains. In air, where the electrolyte is only superficially or discontinuously present, such as from dew or rain, the areas of bare steel protected are smaller. Nevertheless, instances are known of galvanized parts exposed out-of-doors which, although severely damaged by misuse, have remained rust-free for many years due entirely to the sacrificial action of the zinc.

Experience has shown that the corrosion resistance of galvanized coatings in the field cannot be predicted from accelerated laboratory tests. According to K. S. Frazier in his portion of the Monograph on Zinc, "Field inspection has shown that the popular service chart (above) is conservative for general usage and numerous individual cases have shown a protection substantially exceeding the periods shown."

A controlling factor in the life of galvanized steel is the sulfur content of the atmosphere. In polluted areas, such as "severe industrial," the normally protective zinc corrosion products tend to be converted to soluble sulfates which are washed away by rain, exposing the zinc to further attack and accelerating the weathering of the zinc.

It should be explained at this point that the amount of zinc on the surface of a galvanized article is measured in ounces per square foot of surface. That is to say, an article bearing a 2-ounce zinc coat has an average of 2 ounces of zinc on each square foot of surface of the galvanized article. This 2-ounce coat is equivalent to a thickness of .0034 inch or 3.4 mils (1 ounce per square foot is .0017 inch or 1.7 mils thick). Note: In the case of galvanized steel sheets the weight of zinc is specified in terms of total zinc on both sides of the sheet; i.e., a 2-ounce sheet has 1 ounce of zinc per square foot of surface.

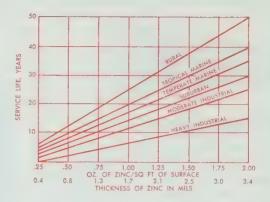
### The Galvanizing Process

The hot-dip galvanized coating is applied by immersing a thoroughly cleaned product in a bath of molten zinc. The zinc used for the coating shall conform to the Standard Specifications for Slab Zinc (Spelter) (ASTM Designation B6) and shall be at least equal to the grade designated as "Frime Western."

As with all metal coating operations, thorough cleaning of the basis metal is essential. Proper preparation of steel surfaces for galvanizing involves three stages—degreasing, scale or rust removal, and fluxing. While practices vary from plant to plant—depending on both need and facilities—the steel must be clean.

If necessary, grease or paint is removed in a hot alkaline or other degreasing bath. After rinsing, the steel is descaled by pickling. Pickling is usually done in a dilute hot sulfuric acid solution (5 to 10 per cent sulfuric acid) to which an inhibitor is frequently added.

Shot or grit blasting may be employed in situations where mill



scale is deeply imbedded in the surface of the steel or where, as in casting, the surface has inclusions of sand particles which are resistant to the normal pickling acids.

After pickling, the material *must be rinsed thoroughly* to rid the surface of residual acid and iron salts. The work is then dipped in an aqueous preflux solution consisting usually of zinc ammonium chloride. This preflux has two functions. First, it coats the work with a thin layer of salt which protects the steel from the air until it is galvanized. Second, it supplements the action of the molten flux blanket which if used, is floating on the zinc bath, by removing any residual oxide and facilitates the wetting of the steel by the molten zinc.

The galvanizing bath is usually controlled at temperatures in the range  $830^\circ$  to  $860^\circ$  F, depending on the type of work being treated.

The fresher and more fluid the flux, the greater is its basic effectiveness and the more readily is it dispelled from the surface of the steel. Because of local chilling action when it enters the bath, the steel invariably carries with it some of the salt, and time must be allowed for the steel to reach the temperature of the bath and for the flux to separate and rise to the surface. During immersion of the article in the zinc bath, a visible bubbling action takes place, resulting from the interaction of the steel, flux, and the molten zinc. The work is usually withdrawn when bubbling subsides and after a preliminary inspection has shown that a continuous coating of zinc has formed.

After galvanizing, the work may be quenched in water or cooled in air. Small parts, such as nuts, bolts, and washers, which are galvanized in baskets in a batch, are usually centrifuged to remove excess zinc before it freezes.

### Structure of the Coating

The usual hot dip galvanized coating has a duplex structure consisting of a layer of iron-zinc alloy phases next to the steel with an outer layer of zinc having the same composition as the galvanizing bath.

It is important to note that the protection afforded depends on the total thickness of the coating and that it is relatively unaffected by the proportions of the alloy and the zinc layers.

The total thickness of the coating as well as the relative amounts of the individual layers which form in the usual hot dip galvanizing process will depend on a number of factors which can be placed in two main categories: composition of the basis steel and galvanizing techniques.

It is generally accepted that the elements silicon, carbon, and phosphorus tend to increase the thickness of the iron-zinc alloy phases. Surface roughness of the steel may also promote alloy layer formation because of the increased surface area exposed to the zinc.

The second main category of variables are those which the galvanizer can control, primarily bath temperature, immersion time, and withdrawal rate. The formation of the iron-zinc alloy is a diffusion process, therefore, higher bath temperatures and longer immersion times will produce heavier alloy layers. Like all diffusion processes, the reaction proceeds rapidly at first and slows down as the layers become thicker.

The thickness of the outer zinc layer is largely independent of immersion time. It depends on the rate of withdrawal and the extent of drain-off. A fast rate of withdrawal of the article from the zinc bath "carries out" more zinc which results in a heavier coating, although the distribution of the zinc layer may become increasingly uneven.

e"Zinc—The Science and Technology of the Metal, Its Alloys and Compounds" edited by C. H. Mathewson, ACS Monograph #142, Reinhold Publishing Corporation, New York, 1959.

### ROHN TOWER QUESTIONNAIRE

Please complete or check all applicable spaces.

CUSTO	MER:		TELEPHONE:	
ADDRE	ss:	CITY	STATE	ZIP
TOWER	SITE:	CITY	STATE	ZIP
CUSTO	MER CONTACT:		TELEPHONE:	
THIS	TOWER IS FOR: ( ) Materia	(R	ohn assumes norma	l site & access.)
			ion Labor ( ) Non-	
Desig	n assumes normal soil and ri	gidity per E.I.A	., 80% guy radius	, and level ground.
FOUND	ATION INSTALLATION: ( ) By	Others ( ) By		sketch or azimuth eg )
TYPE	OF TOWER: ( ) Guyed ( ) S	Self-Supporting		
TOWER	HEIGHT: E	BUILDING CODE:		
BASE	OF TOWER: ( ) Ground ( )	Roof at	ft. above grade	
DESIG	N LOAD: Exposure	Wind	Ice	
OPERA	TIONAL LOAD: Wind	Ice		
EIA O	PERATIONAL REQUIREMENTS:	( ) Yes ( ) N	o () Other (E	xplain)
I.	STEP BOLTS OR LADDERS: (	) None	Quantity:	2 11
	( ) Inside ( ) Outside ( ) Step Bolts	( ) Face ( ) Corner ( ) Leg	( ) St ( ) He ( ) Ot	avy
	SAFETY DEVICE: ( ) Rohn-	·Loc ( ) Other	(Explain	)
II.	OBSTRUCTION MARKING AND LIG	HTING: ( ) No	ne	
	AIRCRAFT WARNING LIGHTS: (	) Yes ( ) No	( ) By Others	(Explain)
	If yes, ( ) FAA - or -	· ( ) ICAO		
	STROBE LIGHTS: ( ) Yes	() No If y	es, type	
	BEACON PLATE REQUIRED: (	) FAA ( ) St	robe Mfr.	
	PAINT: ( ) Factory Appli	.ed ( ) Suffic	ient Paint for Fi	eld Application
III.	VERTICAL WAVEGUIDE SUPPORT:	( ) None	( ) Ladder	( ) Brackets
		( ) Conduit	( ) Brackets	( ) Other
	Location of Vertical Wavegu	ide Support (If	Preference)	
	WAVEGUIDE BRIDGE: Provide	sketch or explan	ation	
IV.	PLATFORMS: ( ) Not Require	ed ( ) Required	(Provide elevati	on and description)
	LIGHTNING PROTECTION: (			
	LIGHTNING ROD REQUIRED:		o If yes, quan	tity
	EIA GROUNDING: ( ) Yes			

(Continued on reverse side.)

VI. ANTENNA INFORMATION (VHF/UHF mounts must state type of mount and length of side arm, if applicable. Attach a separate sheet if necessary.)

QTY.	MODEL NO., SIZE  AND  MANUFACTURER	FREQUENCY	ELEV. ( 2' TOL.) U.N.)	AZIMUTH IF APPLI- CABLE	ANT. MOUNT REQ'D.			NO. OF TIEBACKS	ICE	LINES: SIZE, MODEL & QTY.
										o sucoss
										SEL LIPLE

### VII. THE FOLLOWING DATA IS REQUIRED FOR SPECIAL FOUNDATION DESIGNS:

- A. Allowable bearing capacity
- B. Boring log showing composition and variation with depth
- C. Water table depth and variation
- D. Type of foundation recommended (pile, spread footing, mat, etc.)
- E. Uplift recommendations, pertinent to the type or types of foundations recommended
- F. Consistency of soil:
  - 1. Unconfined compression strength of cohesive soil (clay)
  - 2. Standard penetration blows per foot
  - 3. Rock quality designation for rock
- G. Allowable passive pressure in pounds per sq. ft. per ft. depth (PSF/FT)
- H. Backfill considerations
- I. Factors of safety included in allowable design values
- NOTES: 1. Before any soil boring work begins, the soils engineer should contact Rohn for tower reactions, preferred boring locations, and any other data the soils engineer may require.
  - 2. A detailed soils report, with proper foundation recommendations, will produce the most economical and safe foundation design.

VIII.	ADDITIO	NAL INFORMA	TION, CO	OMMENTS,	OR	SPECIAL	REQUI	REME	NTS:		
-									Lig. Y		LEDVES V
						*		4,111		11	UE MA
SUBMITT	ED BY:					I	DATE:				
		(Signature)									

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